

**THE RESPONSE OF ELEVENTH GRADERS TO
THE USE OF THE CASE METHOD
OF INSTRUCTION IN SOCIAL STUDIES**

by

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ABSTRACT

The purpose of this study was to examine the potential of an instructional methodology, case method teaching, to realize the educational goals articulated in the Graduation Program section of the Ministry of Education's Year 2000 document for educational reform. Case method teaching was also examined in relationship to the document's articulated principles of learning.

Twenty-seven students enrolled in a Grade 11 Social Studies class in a large, urban high school were selected for study. The instructional program in this class followed the instructional principles of case method teaching used extensively at the Harvard Business School. Original case studies, written by the Social Studies teachers, were used as curriculum material to promote examination of subject matter content. The teacher used specific teacher-student interactions to promote the in-depth examination of curriculum concepts.

Permission to carry out the study was obtained from the school board and ethics approval was granted by the S.F.U. Ethics Committee. The investigator was the participant observer, and gathered in-class data throughout the course of a single semester.

Data collection followed a qualitative research design for a single-site case study. Data were gathered from three sources: student questionnaires, teacher interview, and the analysis of audio tapes from student study-group discussions. The data were analyzed through the approach known as triangulation, to reduce the possibility of observer bias that is often a compounding variable in studies of this type.

Findings from these data indicated students' perceived changes in

their ability to think critically, interest and curiosity in learning, and respect for the views, attitudes and beliefs of others. Students also pointed to increased tendency to read more about issues; to discuss issues outside of class with friends and family; and to communicate more effectively with others.

The study allowed the following conclusions to be drawn.

Case method teaching:

- a) is a promising methodology for secondary school students.
- b) allows for the realization of learning goals articulated in the Ministry of Education Graduation Program.
- c) is consistent with the principles of learning in the Year 2000 document.

Further research is needed to determine the effectiveness of the methodology in other grades and other subject areas.

To my **mother** for who taught me perserverance and good humor in the face of adversity; qualities essential to enduring the thesis process.

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CHAPTER ONE

INTRODUCTION

In March 1987, the government of British Columbia commissioned the late Barry Sullivan, Q.C., to head a Royal Commission to examine education in the province. The recommendation of the Commission, published in its report "Legacy for Learners" was based on what it saw as dramatic social and economic changes that have placed new demands upon, and created new expectations for our schools (Sullivan, 1988).

In addition to issues of social and economic change the Commission focused attention on the high drop out rate in the province of British Columbia. The findings of the Royal Commission were supported in the Annual Report, Ministry of Education (1989) that revealed that only 57% of the 18 year olds in this province received a high school graduation certificate through the public school system.

The Government of British Columbia responded to the recommendations of the Sullivan Commission with two Ministers' papers, "Mandate for the School System" and "Policy Direction" which, in addition to a new School Act provided the foundation for the draft paper, "Year 2000: A Curriculum and Assessment Framework for the Future" (Ministry of Education, 1989).

The recommendations proposed in this document represent a dramatic shift in structure and function for education. Central to the new direction is the arrangement of Goals of Education (Ministry of Education, 1989, p.9-10) seen as interdependent and interrelated strands, under the broad categories:

Intellectual Development - to develop the ability of students to analyze critically, reason and think independently, and acquire basic learning skills and bodies of knowledge; to develop in students a lifelong appreciation of learning, a curiosity about the world around them and a capacity for creative thought and expression.

Human and Social Development - to develop in students a sense of self-worth and personal initiative; to develop an appreciation of the fine arts and an understanding of cultural heritage; to develop an understanding of the importance of physical health and well being; to develop a sense of social responsibility, and a tolerance and respect for the ideas and beliefs of others.

Career Development - to prepare students to attain their career and occupational objectives; to assist in the development of effective work habits and the flexibility to deal with change in the workplace.

These general goals have been extended in three separate curriculum and assessment frameworks that form the basis of the Primary Program, Intermediate Program, and Graduation Program.

These extended goal statements are designed to guide program planning and development within a theoretical structure based on principles of learning, about curriculum, about assessment and evaluation, and about reporting. These principles relate to all learners (Ministry of Education, 1989).

A ten year time line for full implementation of the Year 2000 framework has been targeted, with progressive implementation beginning with the Primary Program. As the educational community moves closer to

adopting the proposals drafted in the Year 2000 document, the nearer teachers come to the action point in the process of change. Effective change will require that these theoretical goals and principle statements be translated into instructional strategies. Movement from interpretation to implementation at the classroom level will require research that examines specific strategies in relationship to the Year 2000 document. An introduction to working models of process teaching that have been demonstrated to meet curriculum goals while reflecting basic principles of learning will assist teachers in this movement. This project examines the viability of case method teaching as an instructional strategy in relationship to these goals and principles.

The case method of instruction, most commonly associated with Harvard Business and Law School (Christenson, 1987) is a process approach to learning. The case method presents information that has been developed around large umbrella issues. A good case as defined by Paul Lawrence in "The Preparation of Case Material" (Andrews 1953), is:

the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class and the instructor. A good case keeps the class discussion grounded upon some of the stubborn facts that must be faced in a real life situation. It is the anchor on academic flights of speculation. It is the record on a complex situation that must be literally pulled apart and put together again before the situation can be understood (p.43).

The format for case analysis provides the opportunity for individual, small group and large group collaboration. Once engaged in the elements of a specific issue, students work with their ideas in a small group. The

relevant threads of developing ideas are then pulled together through skilled teacher facilitation with the entire class. This process called debriefing allows students the opportunity to communicate ideas through interactive exchanges that serve to induce continued thinking and deepen personal meaning.

STATEMENT OF THE PROBLEM

The central focus of this study is the examination of the relationship between case method teaching as applied in a grade eleven Social Studies class, and specific goals and principles of learning identified from the "Year 2000: A Curriculum and Assessment Framework for the Future" (Ministry of Education, 1989).

In examining the principles of learning it should be noted that only those that relate directly to learning and the learner have been isolated for examination in this study. While no less important to the overall principal framework, curriculum and assessment are thought beyond the scope of this project.

The initial step in understanding the relationship between case method teaching and these principles is to identify the specific aspects of case method teaching corresponding to each of the three basic principles of learning and the learner (Ministry of Education, 1989, p.9-10). They are:

1. Learning requires the active participation of the learner. Active participation requires that the student finds personal meaning in the activity and in the learning experience.

Active participation is central to the case method approach. Students work with ideas in a group, and are then encouraged to move beyond the small group to a entire class discussion. Issues are identified, ideas expressed, points of view considered, all while the student is actively engaged with the material presented. In identifying the fundamental principles of case method teaching Christenson (1987) notes:

The active intellectual and emotional involvement of the student is a hallmark of case teaching. That involvement offers the most dramatic visible contrast with a stereotypical lecture class...Case discussion demands total participant involvement in a variety of ways, first and foremost in the give and take of class discussion - with mind as well and vocal cords (p.30).

2. People learn in a variety of ways, and at different rates.

In case method teaching students are encouraged to enter into the discussion at any point they feel comfortable. Because the format for discussion is focused on issues and not right or wrong answers, students are allowed the freedom to investigate issues at any level. Hunt (1951) sees case method teaching as an opportunity for students, with varying levels of maturity, to air their views without thinking they will lose face. In Case Method of Teaching Human Relations and Administration (Andrews, 1953) John D. Glover and Ralph M. Hower suggest that case method teaching allows for individual student differences because:

Each students deals with the case as it appears to him. One student identifies himself with a character in the case; another projects his own feelings and attitudes into the situation; a third deals with stereotypes rather than with the people described (p.13).

3. Learning is both an individual and an social process.

Within the "Play-Debrief-Replay" (Wassermann and Ivany, 1988) process, used with case method teaching, are elements of both individual and social interaction. Hunt (1951) suggests that group work is a critical component of the case method:

Learning results from the encouragement gained from collaboration of one's own tentatively held ideas, and from the spirit of joint effort which comes from successful group work. Finally, and no less important, group discussion trains the capacity to communicate to others the ideas that are running through one's mind (p.179).

Having examined case method teaching in relationship to the principles of learning and the learner the focus of the project becomes: Is case method teaching, a methodology reflecting the stated principles of learning, effective in enabling students to meet specific goals of the Ministry of Education (1990b) Graduation Program?

The project examines case method teaching within the framework of specific extended goal statements in the Graduation Program draft document (Ministry of Education, 1990b, p.10-11). They include the following:

- . to analyze critically and creatively
- . to communicate effectively
- . to make considered effective decisions
- . to develop innate curiosity and enhance love of learning
- . to communicate in an acceptable manner
- . to respect the views, attitudes, and beliefs of others

DEFINITION OF TERMS

(1) Play-Debrief-Replay. The terms Play-Debrief-Replay (Wassermann and Ivany, 1988) is used in this project to describe the instructional design in the case method process.

Play - The initial stage in the process, the Play phase, constitutes active engagement in the analysis of case material. During this phase students work in small groups guided by discussion questions that focus on the issues of the case. Within the group students "play" with the ideas generated by the case in hands-on or minds-on contexts.

Debrief - The second phase in the process, Debrief, takes the dialogue beyond the small group to a whole class forum. The primary objective during debriefing is for the teacher, through skilled facilitation, to connect the threads of learning developed in the small groups and continuously work ideas back to the students for further analysis.

Replay -The final phase of the process is Replay. During Replay students revisit the ideas and thoughts articulated during Play and Debrief. In this study the Replay phase of the process are seen in independent work assignments associated with the case.

(2) Big Ideas. (Wassermann, 1990) When working with case method teaching the big ideas refer to the larger significant issues that promote concept development and increased understanding of the issues. The discussion questions during the Play phase of Play-Debrief-Replay and the facilitative questioning techniques used during the Debrief stage are all designed to focus inquiry on the big ideas.

(3) Subtractive statements. Subtractive statements include any comment or reaction to student contribution that closes down discussion. They include any negative reaction to a students' ideas that invalidate their contribution to the group analysis of the case.

DESIGN OF THE PROJECT

Data for this project were obtained from 29 students enrolled in a grade eleven Social Studies class, in a senior high school, in a lower mainland district of British Columbia. The particular class was identified as appropriate to this study based on the in-service training of the teacher in the use of case method teaching and the availability of sufficient case studies at this particular grade level to allow for a full semester study.

The teacher training program was conducted with full administrative support over the course of two semesters. The training program was divided into two stages. The first stage, a full semester inservice program, moved from an orientation of case method teaching, through the effective writing of cases and study questions, to a practice segment focused on responses, debriefing, and classroom application of the techniques. Stage two of the program moved the work with cases into the classroom. This stage stretched over the second semester, centred on full implementation of a program of instruction using case method teaching.

The program of instruction used a series of case studies that were either written specifically for the Grade 11 Social Studies curriculum or were developed around video presentations that focus on related social issues. Instructional design followed the Play-Debrief-Replay format. In

this approach students first work in small groups, guided by discussion questions that focus on the big ideas of the case. The small group discussions are then extended to a whole class Debriefing of the ideas generated during the Play phase.

Data collection during this implementation phase followed a qualitative research technique using a constant comparative method of analysis. The method, first formulated by Glaser and Strauss (1967) moves from data collection through the identification of key issues, categories or patterns to the examination of these for evidence of social process and relationships.

The effectiveness of the program has been examined from three perspectives:

1. Small group discussion. The focus of the analysis centres on the small group discussions during the Play stage. To provide consistency in examining the data, the same group of four students was tracked through the five month semester. The group was randomly selected on the first day of the semester before group characteristics became evident. Students in this group agreed to tape their group discussions during the Play stage of the case teaching process. Four tapes were made.

While the evolving nature of qualitative design poses some problems in stating the particular focus of investigation, preliminary examination centred around specific patterns that revealed a relationship to the goal statements being examined. For example :

- the students' willingness to reexamine their initially stated position in light of additional information or alternative

perspectives shared during the group interactions.

- the acknowledgment of other views, attitudes and beliefs
- collaborative building of ideas by the group
- the defending of position statements that polarize discussions
- the number or type of subtractive statements made during group discussion

2. Retroactive student questionnaire. The questionnaire has both a numerical rating and an anecdotal reflection of case method teaching in relationship to the specific goals and principles under examination in this project. The questionnaire was distributed in class by the teacher at the end of the semester.

3. Post-term teacher interview. This interview examined the teacher's perspective on changes in the students in relationship to the goal and principle statements examined.

LIMITATIONS

The intent of this project was to view the relationship between the use of case method teaching and certain identified learning goals within a single class. While the study does not make a comparative analysis, it does provide a means of viewing a broad range of behaviors and attitudes within a single site after a full semester of a process approach to learning. These limitations are acknowledged and therefore

generalizations should be drawn with caution.

Many classroom variables, teacher personality, popularity, and the effect on behavior that comes with trying something new, must all be considered. A much larger study is needed to fully understand the way these factors play out in the use of case method teaching.

It should also be noted that although subjects were asked not to put their names on the questionnaires, and to respond honestly, an element of inaccuracy does exist with self inventories.

ORGANIZATION OF THE THESIS

This chapter outlined the developing need to examine strategies that are congruent with the goals of the Year 2000 document. Case method teaching was examined in relationship to the basic principles of learning, terms were defined and the basic parameters of the project outlined.

Chapter 2 examines case method teaching from an historical perspective and it's relationship to the acquisition of knowledge, skills and attitudes. Factors affecting student attrition are also discussed.

Chapter 3, 4, and 5 focuses on research methodology, data analysis and conclusions and implications, respectively.

CHAPTER 2 LITERATURE REVIEW

Chapter 2 provides a historical perspective on the evolution of case method teaching from Harvard Law School to the faculties of business, medicine, teacher education, post secondary and secondary school education. Theoretical support for process learning is discussed and factors effecting student attrition are explored. The literature review concludes with an analysis of case method teaching in relationship to the learning goals of knowledge, skills and attitudes articulated in the B.C. Ministry of Education Graduation Program document.

CASE METHOD TEACHING: AN HISTORICAL PERSPECTIVE

Use in Law

In 1871, C.C. Langdell, a professor at the Harvard Law School, began experimenting with case method teaching. Langdell felt that the more traditional method of instruction by lecture did not adequately prepare law students for the levels of responsibility required in their profession. Langdell's educational reforms, built around case method teaching, altered both the content and process of teaching law. As part of his program Langdell had students analyze a specific case, relate its content to principles of law and evaluate the decision on the basis of its relevance to accepted legal opinion. This analysis was followed by a period of class discussion in which Langdell's questions to students promoted further analysis of the case, and of the legal principles. In a review of Langell's work Henryetta Sperle (1933) states he would:

...work with a case until its essence had been extracted and the essential connections made. His objective was to make learning engaging, rigorous and beneficial over the long term.

In a review of case method teaching in Training for the Public Profession of the Law (Reed, 1921), Reed identified the analysis of real legal cases, in relationship to established principles of law as the strength in case method teaching. According to Reed, it is this combination that provides the legal practitioner with the knowledge and skills necessary for effective law practice. While Langdell's method of instruction at Harvard met with initial resistance, its success is evident in the fact that by 1915 it was used in most law schools in the United States (Bauer, 1955).

Use in Business

Influenced by the success of case method teaching at Harvard Law School, the Harvard Business School followed suit and in 1920 developed courses in administration using cases. The new administration program was formed around President Charles W. Elliot's vision of a graduate program that was practical and professional with a focus not only on "what was taught but how it was taught." This commitment to content and methodology continues to the present at the Harvard Business School through an evolving program of instruction built around case method teaching (Christensen, 1987).

An evaluation of case method teaching at the Harvard Business School

(Christensen, 1987) indicates that the method enables students to discover and develop their own unique framework for approaching, understanding and dealing with business problems:

We believe that when educational objectives focus on qualities of mind (curiosity, judgment, wisdom), qualities of person (character, sensitivity, integrity, responsibility), and the ability to apply general concepts and knowledge to specific situations, discussion pedagogy may well be the most effective approach. Lectures about judgment typically have limited impact. Reading about problems or memorizing principles does little to prepare the practitioner, architect, doctor or manager to apply concepts and knowledge to the complexity of real life problems. Discussion teaching achieves these objectives better than alternative pedagogies. It puts the student in an active learning mode, challenges them to accept substantial responsibility for their own education, and gives them first hand appreciation of, and experience with, the application of knowledge to practice (Christensen, 1989, p.3).

While addressing what he perceives as the critical elements of case method teaching and the important role case method teaching has played in the success of the Harvard Business School, Christensen in Teaching and the Case Method (1987), identifies the specific benefits as:

1. The case method enables students to discover and develop their own framework for approaching, understanding and dealing with business problems.
2. The case method is intellectually stimulating for the instructor, affording opportunities for continuous self-education.

3. Every class provides opportunity for new intellectual adventure, for risk taking and for new learning.
4. The case method forges links with instructors to the world of business. It encourages them to be in touch with their professional counterparts.
5. The case method is supportive of a culture that places high value on review and innovation.
6. The case method as practiced at the Harvard Business School is economically efficient.

As a result of the work at Harvard Business School, case method teaching in the specialized areas of administrative leadership, management development and human relations was developed. In each of these related disciplines the case method was recognized as a vehicle through which students could vicariously experience real world problems and concerns. This vicarious attachment gave students the opportunity to test theoretical principles and develop skills of application.

In Case Method in Management Development, Reynolds (1980) outlined the five primary reasons for the effectiveness of case method teaching in management development as:

1. Students found the work more interesting therefore were willing to commit more time to learning.
2. There was an increased likelihood that students

would remember information that they had generated themselves.

3. The work extended beyond simple memorization to the application of specific concepts.
4. The group process provided experience with the human dimension of the critical issues.
5. Students identified themselves as better prepared for the future when using the case study method.

Following the success of case method teaching in law and business, educators in medicine began to see case method teaching as a method of instructing students, not only in fact gathering, but in the applying facts to deductive analysis during diagnosis.

Use in Medicine

In medicine, cases were developed around the patient; the patient became the case. This approach not only provided an opportunity for students to integrate theory and practice, but over time these patient cases became the foundation of extensive medical research and experimentation (Sperle, 1933).

A recent report by the Association of American Medical Colleges encourages medical schools to reduce the amount of teacher led lecture

time and increase the amount of time medical students spend actively involved in learning medicine. The association recommends an increase in independent projects and a reduction in factual material. In an attempt to address these recommendations, Harvard Medical School has developed The New Pathway Program, based on case method teaching (Christensen, 1989).

Use In Teacher Education

Twelve years after the creation of the Harvard Business School, the Harvard Graduate School in Education was established. Faculty members in this program did not consider case method teaching as an appropriate option for the new school. They considered the method too expensive and its application too limited. They argued that while case method teaching was appropriate for developing the skills of decision making, the critical issues in education focus on program implementation and not decision making (Merseeth, 1991).

In an examination of case method teaching at Harvard, Merseeth (1991) found the method was implemented in the Faculty of Business and not implemented in the Faculty of Education for three reasons:

1. Case materials were expensive to develop and unlike the Business School, the Faculty of Education did not have the financial backing of the business community. Private industry covered the initial costs of case production in business, and the external support needed to develop a similar bank of materials in education was unavailable.

2. Case writing was not recognized as true research in the Faculty of

Education. Case writing was recognized as a legitimate research area in the Business School at Harvard and attracted interest from faculty who saw case writing as part of their academic commitment. The Faculty of Education, in contrast, did not view case development and writing as research thereby removing the incentive to build a library of cases.

3. Fundamental disagreement existed in the Faculty of Education about the most appropriate instructional method for the developing program. The Business School had developed around a single vision that viewed business primarily as a decision making process. This vision matched the strength of case method teaching and case method teaching was therefore easily adopted as the program of instruction (Merseeth, 1991, p. 245).

After the decision was made not to use case method teaching in the Faculty of Education at Harvard the method was implemented at New York State Teachers College (Sperle, 1933). In a study of this program four thousand case profiles over a period of 3 1/2 years were examined. Teachers wrote their own cases about experiences during their teacher training. These cases provided the foundation for small group discussion and large group debriefing. Students' evaluation of the effectiveness of case method teaching in this context indicated that:

1. Student teachers grew in the ability to recognize, analyze and solve problems in their teaching situations.

2. Student teachers took an active and more objective part in their own professional and personal development.
3. Student teachers developed leadership and intellectual collaboration through the group relationships developed by this technique.
4. The program of training was made more meaningful by the use of case problems.

More recent interest in case method teaching for teacher training has led to the development of a number of implementation initiatives.

At the University of Colorado-Boulder an experimental case method model of teacher education known as PROBE, an acronym for Problem Based Education, has been developed based on the philosophical ideas of Alfred North Whitehead and John Dewey (Kraft and Haas, 1986).

According to Whitehead there is a rhythm or cycle to learning that he identifies as stages of "Romance, Precision and Generalization." In the first stage, "Romance" the emotion and excitement of a novel situation are experienced. The next stage is that of "Precision" where the novel environment is analyzed. In the final stage "Generalization" a synthesis of emotion and intellect occurs. The aspects of Dewey's philosophy that are critical to the PROBE program are that learning is rooted in experience and that knowledge is derived from a process of inquiry (Kraft and Haas, 1986). The PROBE program incorporates the emotion and excitement of novel

classroom experiences with the rigorous analysis of the problems inherent in these environments. The emotional and intellectual components are integrated through the use of case method teaching in tutorial groups during the "Generalization" phase. The tutorial group is a "critical place where the teacher candidates reflect upon their experiences, react to each other's experience, and apply old and new experiences to the analysis and solutions of case studies." The tutorial groups work with problem based case studies written by faculty, graduate students, teachers in the schools and some participants in the PROBE program (Kraft and Haas, 1986).

The goals and objectives to be met through this program include:

the ability to identify and resolve educational problems; the development of a knowledge and skill base for use in critical analysis of educational issues; becoming a competent member of a small group; becoming a self directed learner able to manage personal working time and self-evaluate skills.

Formative and summative evaluations of the program found it to be sound and "worthy of consideration as an effective alternative to current teacher education" and student evaluation of the PROBE program have been "overwhelmingly positive." The program was selected by the U.S. Department of Education for a grant as a special demonstration project, and involvement in the program has been sought by numerous school districts (Kraft and Haas, 1986).

In an analysis of student thinking processes in teacher education, Barnett (1991) examined a case based curriculum as an alternative for

student teachers to expand their thinking and reasoning abilities. Barnett argues that "cases can play a critical role in expanding and deepening pedagogical content knowledge, which in turn helps teachers understand and build upon their students thinking in productive ways (p.263). Cases in Barnett's study were written by elementary and middle school teachers and focused on math concepts considered hard to teach, including fractions, decimals, ratios and percent. Cases served as a catalyst for discussion among student teachers. While Barnett cautions against drawing conclusions based on one study, his work does suggest that when teachers engage in group deliberation, they can construct ideas that might not have occurred to them through personal reflection about their own teaching. He described a mutual educational process with case method teaching where one teacher has an idea that is elaborated by another teacher. When facilitators asked teachers in this process to reflect on their thinking, a realization that the problem is flawed is often triggered and creative solutions emerge from this realization. He concludes, "Through this collaborative construction process, pedagogical thinking and reasoning are elevated, and creative solutions emerge" (p.270).

Judith Shulman (1991) has examined ways to develop teacher-written cases to foster learning for both the writers and subsequent readers of cases. In her article Revealing the Mysteries of Teacher-Written Cases: Opening the Black Box she traces the development of four sample cases and analyzes the stages of teacher development during the writing process. She concludes that teacher-written cases can and should serve as an important part of the curriculum for preservice, inservice and graduate teacher education. The challenge of teacher education programs,

according to Shulman, is to develop reflective teachers, yet the ordinary school practicum, in her view, is "too fast and messy" to lend itself to reflection. She contends that teaching with cases can foster learning from experience and case writing can provide opportunities for personal reflection on teaching.

In a study of the effectiveness of case method teaching in teacher education, 54 students enrolled in an introductory methods course were taught together in a weekly lecture and then randomly assigned to weekly section meetings, either to a section taught by the case method or a section taught through a discussion of readings and practical exercises on the construction of educational objectives and tests. The study measured change over the course of eight classroom sessions (Kleinfield, 1991).

Kleinfield found that students in the case method section did not differ from students in the discussion section in absenteeism, in talking about coursework outside of class, or in their evaluation of the entire course on the official university survey form. Case method teaching was however, found to increase education students' ability to spot issues in problematic situations, analyse educational dilemmas in sophisticated ways, and identify possible alternatives for action. Case methods were as successful with younger undergraduate students as with mature students with greater life experience.

In an article on case method teaching in teacher education Kathleen Merseth (1991) suggests that there are a number of conceptual orientations to teachers' education and cautions that teaching cases must be carefully selected to reflect these various orientations. Educators must "articulate the conceptual orientation and underlying philosophy of the

program and then explicitly match this orientation with the types and purposes of the cases they use." For example, some will want to use cases that educate students in skills of analysis, decision making and problem solving, others may use cases to help students move from the specific to the general; and others to stress a personal orientation to teaching through self-reflection (p.246).

Use in Post Secondary Education

Data from a study using case method teaching in undergraduate courses at the college level (Tedlock 1981), suggest that case method teaching can be effective in teaching composition. Tedlock found case method teaching made the need to write seem real, emphasized problem-solving and the writing process, and provided students with a clear sense of audience. The majority of students surveyed as part of this study believed the case approach improved their writing as much or more than any of their high school or college writing courses. Tedlock found that the oral discussion and heavy emphasis on personal experience in the method offered weaker students the opportunity to make valuable contributions to class discussions. He also found that student writing tended to follow a less egocentric path than that found with previous strategies (Tedlock, 1981).

Use In Secondary School Education

Case methods are used in teacher education to satisfy two fundamentally different objectives. In one model, similar to that used in medicine, cases are developed around the student's experience.

When using this model the student becomes the case. Data are collected and examined around issues affecting the student (Bauer, 1955). This model is used primarily in guidance counselling and in the development of remedial programs. A second design commonly used with case method teaching in teacher education brings theory and reality together in the manner used traditionally in law and business case teaching. When using this model, curriculum material developed around critical issues becomes the case.

While few studies are available using case method teaching with high school curriculum, one study of environmental education in the tenth grade using case method teaching had findings consistent with those at the post secondary level.

A study of 44 students who were enrolled in a tenth grade general biology course that focused on ecological principles showed the students were helped to clarify their personal value positions in relationship to environmental issues and encouraged to formulate action plans based on these positions. It was postulated that if case method teaching was effective in environmental education, this could be measured in part by the shift in the attitudes students held towards the environmental issues presented in the case studies. Between group comparison of post-test means indicated a statistically significant difference between the experimental and control groups. The study concluded that case method teaching should be considered as a viable strategy for positively influencing tenth-grade students' attitudes towards specific environmental issues (Wilson, 1980).

Many of the theoretical foundations for learning that emphasize

process, student involvement and relevancy have been historically recognized as critical elements of student learning in case method.

EXPERIENTIAL LEARNING THEORY

The basic premise of experiential learning theory as supported by the work of John Dewey (1938), Kurt Lewin (1951) and Jean Piaget (1970), is that learning follows an integrative process.

Dewey, an educational philosopher, saw learning as a process that unites observation of surrounding conditions, and knowledge of the past, with a judgment. He suggested it is this act of judgment that moves learning to a point of action. Through this learning process new experiences are continually incorporated into an experience base that moves the learner forward toward what Dewey (1938) calls "adult purpose." Through his work on group dynamics Lewin (1951) developed a conceptual model of learning that brought concrete experience and analytic detachment together. Learning, in Lewin's model is a four stage cycle that begins with immediate, concrete experience. This experience, as the basis for observation and reflection, is assimilated into a knowledge base from which new experiences are created. The end result of this cycle is what Lewin calls "effective goal directed learning"(Kolb,1984).

A third contribution to experiential learning comes from the work of developmental psychologist, Jean Piaget. According to Piaget, intelligence is shaped by experience. It is not an innate characteristic but a product of the interaction between the person and his or her environment. Through environmental interaction children move developmentally from a concrete

to an abstract orientation to the world. In Piagetian terms, the key to learning lies in the mutual interaction of the process of accommodation to experience in the world, and the process of assimilation of experiences from the world, into existing concepts. The process of cognitive growth from concrete to abstract and from active to reflective orientation is based on this continual transaction between assimilation and accommodation (Piaget, 1970).

Based on the contributions of Dewey, Lewin and Piaget, Kolb (1984) developed a theory of experiential learning that includes the following principles:

1. Learning is a process

According to Kolb, ideas are not fixed but rather they are formed and reformed through experience.

2. Learning is grounded in experience

Through the process of learning, knowledge is derived and tested through the learner's interaction with the environment. Knowledge and skills developed in one situation become instruments for dealing effectively with new situations in the real world. This continues as a lifelong process.

3. Learning is a process of tension-conflict resolution.

Experiential learning theory suggests that new knowledge, skills and attitudes are achieved through confrontation within four modes of learning: concrete experience, reflective observation, abstract conceptualization and active experimentation. Effective learners involve themselves in all four of these modes.

They involve themselves in new experiences and are able to reflect on these experiences from many perspectives. They create concepts that integrate their observations into logical theories. Effective learners are able to use these developed theories to make decisions and solve problems (Kolb, 1984).

According to Kolb (1984) the main function of education is to encourage an interest in knowing; to develop skills with which to apply knowledge; and to develop attitudes that hold personal value.

In Education for Judgment (Christensen, 1991), Richard F. Elmore, Professor at the Harvard Graduate School in Education describes discussion teaching as a systematic way of constructing a context for learning from the knowledge and experience of students. He suggests that new learning is contextual in that:

new knowledge is acquired by extending and revising prior knowledge; new ideas acquire meaning when they are presented in a coherent relationship to one another; and knowledge becomes usable when it is acquired in situations that entail application to concrete problem-solving (p.xiv).

During case method teaching, the student works with ideas through concrete hand/minds on activities during the "active engagement" phase. Students reflect theoretically on this learning during the debriefing stage. Case method teaching brings the learner in touch with the environment either through an active extension to real life situations during replay or through vicarious involvement with simulated real events

during the "active engagement" phase. ✓

CASE TEACHING AND FACTORS AFFECTING STUDENT ATTRITION

The Sullivan Commission originated, in part, to examine those factors that were perceived to contribute to the number of students withdrawing from school each year in the province of British Columbia (Ministry, 1989). This section examines the issues of student attrition in relationship to specific program initiatives. Case method teaching, an instructional method that corresponds to the principles of learning outlined by the Commission, is examined in relationship to these findings.

Jeremy D. Finn (1989) presented two models to explain contributing factors to student drop-out. The "frustration self-esteem model" identifies school failure as the starting point of an impaired self-view that leads from feelings of frustration and embarrassment. Impaired self-view, according to Finn, is operationalized through rejecting behaviors that include withdrawal from school. Ford and Nichols (1987) provide one framework for explaining how unattainable goals in school may lead to frustration and withdrawal. The authors list "cognitive goals" as one of the general consequences that students strive to attain. If students experience continual frustration in school and are unable to attain this goal, frustration develops and self image is affected.

A second model suggested by Finn (1989) to explain student drop-out is the "Participation Identification Model." This model highlights the role of students' active participation and feelings of identification with

school. According to this view the likelihood that a student will complete high school is increased with participation in school-relevant activities. Finn argues that students who have a sense of belongingness feel they are a part of the school environment and that school constitutes an important part of their own experience. These students, he contends, value school success.

In an analysis of factors related to delinquency behaviors that lead to withdrawal from school, Polk and Halferty (1972) found the uncommitted delinquent student characterized by withdrawal behaviors from school that are demonstrated through psychological discomfort and alienation. The essential components of alienation include powerlessness, meaninglessness and social isolation (Seeman (1975).

In High School Dropouts: Causes, Consequences and Cure, Grossnickle (1986) suggests the primary reason that students leave school is that they are desperately trying to escape failure. Dropouts experience adjustment difficulties that result in resentment and hostility toward school in general and teachers in particular. Dropouts in Grossnickle's report claim they are escaping "a cruel, tedious, boring and uncaring" environment (p.11).

In March, 1991 the Coquitlam School District working on a grant from the Ministry of Employment and Immigration examined the causal factors related to early school leaving. This research indicated that students who leave the school system present an array of personal characteristics that include:

- feelings of low self esteem

- feelings of low self confidence
- feelings of lower popularity
- feelings that others see them as less important

The study describes leaving school as a process that begins with lack of involvement in school activities. Eighty-two percent of the respondents in the study listed school-related reasons as being the most important factors in their withdrawal.

Solution to the Problem

When students in the Coquitlam School District (1991) study were asked to rate a number of responses to indicate how the system could have prevented them from leaving school, the following were noted (p.11):

- more understanding teachers
- more trusting counsellors
- less sterile environments
- less work producing focus
- work at your pace
- more understanding of individual differences
- more consideration of student opinions

In Finn's (1989) view, active participation in the classroom is the "minimal essential condition for formal learning to occur" (p.127), and performance in class is a direct outcome of student participation. Failure

to attain academic goals, according to Finn (1989) is often blamed on deficiencies in school programs. He identifies a number of school practices that may be targeted for change. They include: curriculum tailored to the needs of students at risk of withdrawing from school; positive teacher attitudes; and the implementing of teaching practices that involve students in the learning process more than do traditional approaches.

In a study on student involvement, Anderson and Scott (1978) documented that different teaching methods affect levels of student involvement. In an observational study of grade nine to grade twelve they compared different teaching methods with the proportion of time that students were engaged in task-relevant behaviors. Data from this examination suggest that teachers working with students at risk of drop-out should emphasize class discussion and seatwork methods.

Research by Hamilton (1986), Newmann (1981) and Slavin (1983) on interventions for at-risk students suggests teaching practices that involve students in the learning process and teaching practices that involve students in co-operative learning strategies are particularly appropriate.

According to Grossnickle (1986), dropouts complain that their teachers do too much lecturing and too little to show the application of lessons to a student's present or future life. When teachers respond to the learner's point of view, "they offer hope to the underachiever who needs special reasons to stay in school" (p.23).

A comprehensive project to enhance learning for at-risk students

developed by three teachers in Norwal, California responded to what they saw as potentially bright students that were not being helped by traditional approaches of remediation. Research from the project challenged the underlying assumption of current remedial programs that at-risk students have a knowledge deficit. The program, called Higher Order Thinking Skills (HOTS), works on the premise that students fail, not because they are unmotivated, lack interest, have low self esteem, poor programming or incompetent teaching, but because they have don't understand "understanding" (p.390). Program developers suggest that lack of knowledge about content may be a symptom of the real problem, which is that students cannot construct the types of understanding that allows them to build the connections that are critical to the retention of content.

The objective of the HOTS programs was to see whether it would be possible to improve thinking skills in a way that basic skills and social skills would improve as a by-product. The program combined use of the computer with the Socratic teaching method to stimulate the thinking techniques of metacognition, inference from context, synthesis of information and decontextualization. The methods provided at-risk students with activities that were intellectually challenging, and improved their ability to deal with problems and apply concepts without initial concern for connecting them to regular classroom curriculum. The focus of the program was on the process of thinking.

Teachers in the HOTS Project were trained in discussion methods designed to maintain an atmosphere of ambiguity so students would have to construct meaning and articulate ideas. It was their contention that

the key to this method was the "way in which teachers asked questions and responded to the answers students gave" (p.390).

During the program, students in grades four to seven engaged in intensive, consistent exposure to sophisticated conversations in groups of fewer than fifteen students for thirty five minutes each day. The project ran four days a week over a two year period.

Finding of the HOTS Project include:

1. A program that focuses on students' thinking can also improve achievement in the basic skills even though the program focus was not content specific. Students' average gains on standardized reading and math tests between fall and spring were more than fifteen percentile points. The spring-to-spring testing data indicated that reading gains were 67% higher than national averages, and math scores were 123% higher. Second year gains exceeded the national average. Not only were scores increased on norm referenced standardized tests of basic skills, but they also produced dramatic increases on criterion-referenced tests. Data from the HOTS programme in Detroit Public Schools found that HOTS students, without supplementary remediation, achieved a level of math mastery that was three times higher than students who were given extra practice and drill (p. 391).

2. Tasks in thinking can be designed to enhance the ability of students to learn content the first time it is taught. Researchers in the HOTS program found that once students began to work with ideas, they engaged in the

basic linking activities that promote long term memory. The time students spent in thinking gradually led to their ability to process whatever was being taught, the first time it was taught.

3. At-risk students have tremendous levels of intellectual and academic potential. In the HOTS Program, when at-risk students were challenged with extremely difficult concepts, given enough time to work on their ideas, and given the responsibility for generating those ideas, the quality of thinking improved. Teachers in the program found that students could go far beyond what conventional wisdom suggested about these students. Further, it was seen that these students required sophisticated and challenging curriculum, not the "dumping down" (p.391) practices of traditional remedial programs. Thirty-six percent of HOTS students at a test site in Arizona made the honor roll, while 10% of the HOTS students in a Minnesota elementary school were rediagnosed as gifted.

4. It is possible to dramatically change the relationship between teacher and student. Students in the HOTS program were described as having tremendous eagerness to learn, were curious, excited and responded positively to challenging learning situations.

5. The fundamental learning problem for at-risk students was that they did not understand the concept of "understanding" (p.392). At-risk students did not know how to deal with ambiguity or unstructured learning, and they viewed information in discrete isolated units.

Pogrow (1990) contends that much of the "understanding" deficiencies

at-risk students face is because the adults in students' lives do not model thinking process. In his view such modelling has traditionally been done at the dinner table and these conversations are increasingly rare. He found that working parents on the average have thirty seconds of conversation with their children each day and studies of conversations in school have shown that 93% of the questions asked of students require one or two word answers.

6. The education profession does not seem to recognize that the problem of not understanding "understanding" exists. When Pogrow (1990) examined the relationship between students' level of understanding and the perceived length of remediation determined by experienced educators, he found that vast discrepancies exist. While many educators predicted a two to five day program to remediate a specific problem, teachers in the HOTS program were spending three to four months to meet the same objective, leaving Pogrow to conclude that educators lack an appreciation for the complexity of the issue.

7. Fundamental learning problems can be eliminated if enough time and resources are available. The HOTS program demonstrates that the application of cognitive theory and pedagogical principles can have an effect on at-risk students (Pogrow, 1990, p. 391-393).

Pogrow concludes that:

As the curriculum grows more complex, lack of knowledge about content becomes a symptom of the real problem, which is that students cannot construct the types of

understanding that can build the connections that are critical to the retention of content. Instead of helping students to think in terms of constructing relationships, such remediation reinforces the tendency to view learning as memorization. Without such "conceptual Velcro," new information slips out of the mind as fast as it comes in, producing a kind of "conceptual Teflon" (p.394).

Supporters of the HOTS program view real accomplishment as the best developer of self-concept. They argue that the more sophisticated the accomplishment the greater the gain in self esteem and question the appropriateness of traditional approaches to improving self-concept for at-risk students that simplify the questions and praise students for correct answers (Pogrow, 1990).

The position taken by supporters of the HOTS program is substantiated by Shulman (1987) in Teaching Alone, Learning Together: Needed Agenda for the New Reform. Shulman calls for an emphasis on higher order thinking and reasoning skills and a reduction in rote learning. He argues that "dumbed down" curricula and overemphasis on remedial and basic-skills should be replaced with higher order thinking, problem solving and reasoning, through active involvement.

In a study of the effects of social studies education on minority students' sense of self-concept, Shrive (1973) found that when social studies curriculum allows students to examine real issues that reflect their own experiences, self concept is improved. Such teaching, he contends, improves self concept by placing emphasis on problems, perspectives, and alternative approaches and solutions as defined, explained and valued by the student whose life is affected (p.127).

Feelings of self worth are developed through the opportunity that small group discussions offer for leadership experiences.

Through case method teaching students are able to examine personally relevant issues that reflect real life concerns. This examination has both an individual and a collaborative group component.

In this chapter, a review of the literature on case method teaching was examined historically, from its inception at the Harvard Law School. Literature on process learning was also examined. This examination was followed by an exploration of the factors affecting student attrition. These factors were examined in relationship to the principles of learning reflected in case method teaching. The literature review concludes with an examination of case method teaching in relationship to the acquisition of knowledge, skills, and attitudes as advocated in the goal statement for education by the British Columbia Ministry of Education:

The purpose of the British Columbia school system is to enable learners to develop their individual potential and to acquire the knowledge, skills, and attitudes needed to contribute to a healthy society and a prosperous and sustainable economy (Ministry, 1989, p. 7).

KNOWLEDGE, SKILLS AND ATTITUDES LEARNING GOALS

The knowledge, skills and attitudes associated with discussion teaching are universally relevant. The capacity to ask appropriate questions, to deal with student uncertainty, to reward and punish, to create learning environments of openness and trust are common to any discussion class, whether the substantive topic be Elizabethan poetry or national military policy (Christensen, 1987, p.3).

In a research study focusing on knowledge and skill development using case method teaching in management training, Ahmad Ahmandian (1986) observed undergraduate students in a course on principles of management at Michigan Technological University. The course of instruction was divided in two sections. The first four week session consisted of lectures on the fundamentals of management. Students were encouraged to complete readings and participate in class discussions. During the second four week session, lectures were given only during the first half of the class. The last half focused on carefully selected cases for student analysis and discussion. At the end of the semester students participated in a course evaluation. Ninety-one percent of the students indicated satisfaction with case method teaching. Case method teaching helped students in thinking and problem solving. They could better understand the issues of the course and identify areas where they needed help. Students felt case method teaching helped them to learn and clarified their thoughts.

In Teaching about the Law, Ronald A. Gerlach and Lynne W. Lamprecht (1988) examined the integration of knowledge, skills and attitude development through case method teaching at the secondary school level. They found the process approach that was being used at the time to teach social studies increased the focus of instruction on critical thinking but neglected the gathering of factual information. They identified case method teaching as a viable strategy to combine the areas of knowledge and skills. It is their view that students must first develop basic knowledge and be able to comprehend the specific facts related to a case.

Knowledge and fact acquisition are essential precursors to effective analysis, and attempts to apply decision making and problem solving skills without this foundation will frustrate the learner and distort thinking.

According to Gerlach and Lamprecht (1988), knowledge, skills and attitudes each relate to a specific phase in case method teaching process. Knowledge and fact acquisition embody the primary phase of case analysis. After this phase, knowledge and fact acquisition leads to a second phase where these data are applied to the development of arguments and the formulating of conclusions. A third phase in the process moves beyond the acquisition of knowledge and application of skills to the formulating of personal positions based on the issues of the case.

Gerlach and Lamprecht found that:

students learn better, in terms of critical thinking skills, and the acquisition of knowledge, and attitudinal development when they actively participate in discussion and problem solving (p.152).

This cycle of experience is consistent with Kolb's theory that effective learning involves the integration of knowledge and theory and the development of personal judgment.

Wilson and Tomera (1980), examined the effect of case method teaching on secondary school student attitudes toward the environment. In this study, comparisons were made between students who were exposed to knowledge and skill based curriculum, through a traditional lecture approach, and students who received instruction in knowledge and skills, in addition to case studies. Through case method teaching students examined environmental issues assuming various citizen, government, scientific, and

industrial positions. When measured on an 18-point attitude inventory a slightly negative change was found in the pre- and post-test attitude for the control group who had received only knowledge and skills instruction. The experimental group, exposed to value issues in case method teaching, exhibited a positive shift in environmental attitude. The data from this study indicated that the use of environmental case studies positively influences environmental awareness and other positive attitudes toward environmental issues. According to Hungerford and Peyton, cited in Wilson and Tomera (1980), when the three components of knowledge, process, and affect are incorporated, students are able to understand ecological principles, clarify their own value position regarding ecological problems and are prepared to take action toward a solution.

Work by Spiro, Coulson, Feltovich and Anderson (1988) cited by Barnett (1988) established that abstract knowledge is "highly intertwined with case-centred reasoning" and that the best way to achieve cognitive flexibility is by a "method of case based presentation which treats a content domain as a landscape that is explored by criss-crossing it in many directions" (p.6).

Citing Allan Bloom's The Closing of the American Mind, Postman (1989) argues that students need stories, narratives, and tales. Without such frameworks they have no way of knowing what things mean. In Postman's view a story provides a structure for our perceptions. Only through stories do facts assume any meaning whatsoever.

In Teaching by Cases, (Christensen, 1987) Rogers and Farson identify the skill of active listening as fundamental to the process of attitudinal change. They contend that when students have the opportunity to

listen carefully, they change their values, their personal philosophy, and become more mature, democratic and less defensive in their relationship with others. They suggest that when people feel others have listened to them they find more personal value in their contributions. Rogers and Farson sum up the relationship between active listening and attitude in the following statement:

Not the least important result of listening is the change that takes place within the listener himself. Besides providing more information than any other activity, listening builds deep, positive relationships and tends to alter constructively the attitudes of the listener (p.167).

Chapter two has reviewed the historical development of case method teaching and examined theoretical support for process learning. It explored the issue of the relationship of student-centred learning and student attrition and concluded with an examination of the relationship between the acquisition of knowledge, skills and attitudes and case method teaching.

Chapter three describes the research method and data collection.

Chapter 3

METHODOLOGY

Chapter 3 provides a description of teaching by the case method through a presentation and analysis of the Centennial High School Case Teaching Project. The description includes the two stages of the project -- the staff development program that constitutes Stage 1, and the classroom implementation stage, Stage 2. The qualitative methodology used to gather data is also presented.

The Centennial High School Project

In the Fall of 1989, Cathy Elliott Tindell, Vice Principal at Centennial High School in Coquitlam, British Columbia, contacted Selma Wassermann at Simon Fraser University indicating potential teacher interest in staff development work in teaching for thinking. The possibility of extended staff development work in teaching with cases in grade eleven Social Studies, as a vehicle for implementing teaching for thinking at the secondary level, was discussed. An orientation meeting with the Social Studies department was arranged.

Fourteen teachers and the departmental chairman attended the meeting in which plans for a one semester school-based staff development program, followed by a one semester classroom implementation period were laid out. For a variety of reasons eleven of the original fourteen teachers withdrew after the second session, leaving only three Social Studies teachers in the program. These three were joined by one teacher each from biology, art,

journalism and English, a total of seven.

In January, 1990 the teachers began staff development training consisting of fifteen weeks of school-based staff development work, in which they studied case writing that focused on key curriculum concepts, or "big ideas" in their subject areas. They also worked on developing skills in the art of "discussion teaching" (Christensen, 1987). Specific details of the staff development program are described in a subsequent section of this chapter. The teachers continued to write cases throughout the summer and, by September, 1990 had produced a total of twenty teachable cases. The work in staff development carried out at the Centennial School was fully supported philosophically and financially, by the Coquitlam School Board Administration.

Teachers in the program began to use teaching with cases in their classes during the Fall, 1990 semester. In the three Grade 11 Social Studies classes, teaching with cases became the primary instructional mode. During this implementation phase data were collected that examined the various facets of case method teaching in a Grade 11 Social Studies class. That examination provides the data for this case study.

Staff Development

The staff development program carried out in the Centennial Project was designed by Wassermann (1990) (see Appendix A) and followed the principles of effective staff development work advocated by Fullan (1991). These principles included implementation in terms of stages. The first stage, staff development, involved identifying the purpose and nature of the change, examining program philosophy, and setting a plan for supporting

implementation. Specific skills necessary for program implementation are developed during this stage. The second phase, classroom implementation stage, provides support for teachers as they begin to work with the strategies and philosophy developed during the staff development.

The first stage of staff development work was carried out over a period of fifteen weeks and involved a series of progressively more difficult activities that focused on four broad areas of professional development:

1. Orientation

In the first weeks of the staff development program, participating teachers examined the relationship between teaching with cases and teaching for thinking. They also examined the ways in which cases promote understanding of curriculum content and important curriculum concepts and how cases are written to reflect the "big ideas" in the topics being studied. As well, teachers considered their beliefs about teaching and learning, in an attempt to discover if individually held beliefs were compatible with the philosophical orientation of case method teaching. Such matching of beliefs is one important criterion in staff development work that has major implications for effective classroom implementation (Fullan, 1990).

2. Case Writing and Development of Study Questions

Orientation to important concepts of teaching with cases was followed by an intensive period of case writing. All participating teachers engaged in writing cases that reflected important concepts in the curriculum of their subject areas. Since each case was followed up by a list of "study questions" that would provoke student discussion and thinking about the issues in the case, teachers also were given practice in writing higher order questions. Learning to write "study questions" that were appended to each case required understanding of the structure of higher order questions and how these are framed to promote students' higher order thinking (Raths, 1986, pp.170-174).

3. Debriefing

Debriefing a case, also referred to in case method teaching as "discussion teaching" (Christensen, 1991, pp.15-34) involves the teacher's ability to use a highly interactive student-teacher discussion mode, in which the teacher helps the students to extract the critical meanings of a case. Debriefing requires the use of several important discussion teaching skills, including attending and reflective responding, higher order questions and the ability to weave interactive threads into an interactive dynamic that illuminates the important meanings of the case. In their studies of discussion teaching, teachers

examined how certain responses call for students to reflect and examine ideas, and how others limit students' cognitive processing (Raths, 1986, pp. 167-173). As well, they studied classroom conditions that make environments safe for students to volunteer their ideas. Discussion teaching skills continued to be examined and practiced during the classroom implementation stage as well.

4. Classroom Applications

In the final weeks of the staff development program participating teachers identified those classroom conditions that seem to be related to effective implementation (Raths, 1986, pp. 163-167). Issues of curriculum, classroom organization and student orientation were also examined.

The three Social Studies teachers chose to form a team and work collaboratively producing a total of seven cases. Social studies cases centred on issues of immigration, war and patriotism, political hostilities and nuclear armaments, the changing values and roles of women in the twenties, and the unjust treatment of Japanese Canadians in Canada during World War II (Bickerton et al., 1991). These cases were supplemented by cases written by other teachers in the group, on issues including the Great Depression, equality before the law, Nazi treatment of the Jews during W.W. II, and the rise of consumerism. Additional cases were developed using

related videos as the case, to provide adequate instructional material for a full semester of teaching with cases. Each case also included a list of related curriculum materials that included texts, novels, documentaries and commercial films, so that the issues examined within a case could be further examined through other perspectives.

The staff development stage of the project was followed by a second stage, a semester of classroom implementation.

Classroom Implementation Stage

The classroom implementation stage of the Centennial High School Project was carried out over a full semester, from the beginning of September to the end of January. Working with the theoretical understandings and skills developed during the first stage of staff development work, teachers began to use the cases they had written for their Social Studies II classes. Other participant-teachers worked with the curriculum cases they had written and continued to write additional cases. Further in-service work during this stage consisted of workshops, classroom observations and individual consultation and focused on teachers' examination of their interactive teaching skills in debriefing the cases.

During the implementation stage the original group of seven teachers continued to meet. These meetings provided a support network for teachers as they were learning to use these new teaching skills, allowed them to address issues of concern in classroom implementation, and provided for feedback on technique. The need for evaluation methods that were congruent

with a process approach to learning was also discussed.

In summary, the staff development program, designed according to principles of effective inservice training, was carried out in two stages, over a period of two semesters. Seven teachers participated in the program. This context allowed for the gathering of data, through case study methodology, in a selected Grade II Social Studies class, to examine the effectiveness of teaching with cases.

Research Methods

In order to examine teaching with cases, a single site, case study investigation was designed using qualitative research methods of data collection.

If learning is a social process, as stated in Year 2000 Assessment and Framework document (Ministry 1989) then research in education must also allow for the examination of social behaviors as part of the learning process. Unlike quantitative research, which focuses primarily on the measurement of terminal behaviors, qualitative analysis relies on descriptive data of emergent relationships.

Case study, as a research methodology, is seen as an appropriate method for investigation when a detailed examination within a natural setting is required. The study of teaching with cases at Centennial High School involves the examination of factors within a single site that affect the acquisition of knowledge, skills and attitudes.

While it is recognized that a single case study will inevitably raise questions as to how typical the subjects of the research are of comparative

populations, there is support for the generalization of such data. Spindler (1982) quoted by Crossley and Vulliamy (1984) on the generalization of qualitative case study data argues:

An in-depth study that gives accurate knowledge of one setting not markedly dissimilar from other relevant settings is likely to be generalizable in substantial degree to those other settings... it is better to have in-depth, accurate knowledge on one setting than superficial and possibly skewed or misleading information about isolated relationships (p.203).

Bogdan (1975) suggests that while settings and subjects do retain their uniqueness, their similarities allow the researcher to study certain social processes within a single setting.

The main strength of case study as a research technique, according to Crossley and Vulliamy (1984) lies in the maximization of what they refer to as "ecological validity" of the data. Ecological validity refers to the extent to which the behaviors observed in one context are generalizable to other, similar contexts. They suggest that case study research gives a more accurate portrayal of the realities of teaching in a natural setting and that it is this realistic portrayal that allows for the examination of process and "unanticipated outcomes as a product of innovation." According to Eisenhardt (1989) when relationships are identified and understood through the support of qualitative data, internal validity of the research is established.

In qualitative research the researcher acts to selectively collect data, and analysis of events within a case study requires data to be interpreted by the researcher (Bogdan, 1975). Whatever safeguards are built into the

qualitative research technique to circumvent research bias, it is recognized that all data collected must be interpreted through the perception of the researcher and guided by the observer's theoretical orientation. Bogden and Biklen (1982) suggest that while research bias may limit the strength of case study, the theoretical orientation of the researcher may have a positive rather than a negative affect on data interpretation. They argue that it is the theoretical orientation of the observer that "helps data cohere."

In spite of the considerations given to observer orientation by Bogden and Biklen (1982) case study research, as a bottom up investigative approach, may result in narrow theory development. According to Eisenhardt (1989) while case study research may be empirically valid, the theory generated is often modest in scope and focused on specific phenomena. She suggests that more wide range theory may require multiple site case studies where theory building can be incorporated into theory testing empirical studies.

While case study requires caution in its potential to generalize from the results, it is, nevertheless, a preferred methodology in yielding more in-depth data to illuminate in-process applications and a wider perspective on results. While quantitative data would examine whether such teaching methodology affected change, case study analysis instead focuses examination on "what happened" when such a methodology was used. That focus forms the basis of the discussion that follows.

Study Site Selection and Organization

The semester immediately following the staff development stage of

the Centennial High School Project was designated as the classroom implementation stage. While during this time, all seven teachers used the cases they had written with their respective classes, the three Social Studies teachers, however, planned a full semester of instruction using the cases they had written. The availability of instructional material and their commitment to an emphasis on teaching with cases provided the opportunity for an extensive study of teaching with cases in a grade eleven Social Studies class.

While it is recognized that data from multiple site case studies would tend to increase the generalizability of the findings, a single site was determined more manageable in terms of volume of data. According to Eisenhardt (1989) a characteristic weakness of case study research is the loss of perspective that comes with the analysis of large volumes of data. The result can be "theory which is very rich in detail, but lacks the simplicity of overall perspective." Relationships examined in a single site case study may provide specific information that will lead to further research. This can provide valuable information in other research that employs multiple site analysis, thus circumventing the kind of limitations imposed by the high volume of data generated through multiple site analysis.

The selection of a single site for this case study analysis began with a discussion with the three grade 11 Social Studies teachers. During this discussion the objectives of the proposed data gathering methodology were outlined. Each teacher was asked to share his thoughts and feelings about being the possible subject of such a study. One of the three teachers indicated immediate discomfort at the thought of being observed and evaluated during his first attempt at teaching by the case method. Another,

while not dismissing the idea of being the subject of a single site analysis, was also reluctant. The third teacher, while not completely confident in his skill at case teaching, suggested that he had recent experience with student teachers and felt an external observer would not significantly affect his teaching. His classroom was chosen for the case study based on this admission.

Centennial High School has a student population of 1,850 and a staff of ninety. It is located in a suburban community of professional families and maintains a reputation in the district as progressive and supportive of innovation. The school is well maintained and the classroom selected for study is well organized and well equipped. Posters and maps decorate the walls. The desks are movable.

Students in the class selected for the case study were described by their teacher as vocal, social and well behaved. The average student age in the class was sixteen. The teacher selected for this study was well liked by staff and students and highly involved in extra curricular activities at the school. He has been teaching for eighteen years.

Unobtrusive observations were made in the classroom once a week, on Friday mornings. Beyond an initial introduction to the class in September, the observer sat unacknowledged at the back of the classroom during the one hour and twenty minute classes. During the observations students were involved in group discussions, whole class debriefing and the development of independent projects and assignments. Notes were not taken.

For the purpose of this study, the teacher selected has been given a pseudonym to protect both the anonymity of teacher and students.

Method of Data Collection for the Case Study

Allan Lauren's¹ Social Studies II class met every day, Monday through Friday, from 9:20 to 10:40 a.m. During the first week of September the teacher introduced the concept of teaching with cases to the class. Changes in lesson formats and expectations for students involved in teaching with cases were also discussed. The case method was identified as an approach to Social Studies that emphasized the development of ideas over the memorization of content. The case method was introduced to students within the context of the Year 2000 Assessment and Framework document (Ministry, 1989). ✓

Students worked with cases generally following this format: copies of the case material were distributed in advance to each student for independent reading. Students were usually given the cases to read for homework, so that class time could be concentrated on group work and debriefing. After the case had been read, students were arranged in small groups to discuss the study questions included in the case. The group discussion generally lasted between twenty and forty minutes and this time allotment was set by the the teacher. To minimize teacher influence in the small group discussions, no advance preparation was given for the study questions. ✓

Format steps

Whole class debriefing sessions immediately followed the small group discussions, and took the remaining time of the one hour and twenty minute period. In the classes that followed the initial discussion of the case, further study of the central issues and concepts of the case were examined through further debriefings, and through the examination of newly introduced materials such as journal and newspaper articles, films, videos

and textbook selections. Follow up to the cases occurred over a one to two-week period. It was during this period that students also carried out independent projects which were used as the basis for teacher evaluation of their work.

Data Collection

The lack of apparent rigor in data collection in much case study research has been identified by Crossley and Vulliamy (1984) as the basis for accusations of bias and for concern over the lack of generalizability of findings. According to Eisenhardt (1989) relationships or constructs that emerge through a triangular data gathering process strengthen the grounding of the theories under examination. Triangular investigation refers to data collection that examines a body of research from different levels or perspectives. The data gathering for the case study at Centennial High School examines case teaching from three perspectives.

A student questionnaire was one means of gathering data. This questionnaire, given to students at the end of the semester, asked students to assess and describe the degree of change they observed in their behavior in relationship to specific goal statements. These data are analysed in Chapter four in relationship to students' acquisition of knowledge, skills and attitudes.

Data were also collected through audiotape analysis, which allowed for examination of group interactions during the small group work sessions of the teaching with cases process. These data are examined in relationship to the changes in behavior that were identified in the student

questionnaire.

Data were also gathered from the perspective of the teacher. The data from the teacher's perspective on teaching with cases are analysed with reference to the changes described in the student questionnaire and to the interactive behaviors examined in the dialogue transcribed from the audiotapes.

All of these data gathering procedures are described in greater detail in the sections below.

Permission to carry out this study was secured from the Superintendent of Schools for the District of Coquitlam in compliance with the recommendations of the Ethics Committee, Simon Fraser University (Appendix B).

Student Questionnaire

At the end of their semester's work in Grade 11 Social Studies using the case method approach, students in Allan Lauren's class were given a questionnaire to complete.

The following five goal statements from the Year 2000 Graduation Program (Ministry, 1990b) are reflected in the questionnaire:

The Graduation Program provides experiences that enable students to:

- make considered effective decisions
- think critically
- communicate effectively

- develop their innate curiosity and enhance their love of learning
- respect the views, attitudes and beliefs of others

Questions relating to these five goal statements appeared as:

1. How has the use of the case study method affected your ability to examine complicated issues in a critical way?
2. How has your ability to communicate your ideas been affected by the case study process?
3. Since the introduction of the case study method what changes have you noticed in your ability to make good decisions?
4. What effect has the case method had on your level of curiosity and general interest in learning?
5. What kind of change have you noticed in the level of respect you have for the different views, attitudes and beliefs held by other students?

The remaining two questions on the questionnaire reflect the goal of education to develop a lifelong appreciation of learning. The questions appeared as:

6. To what extent has the case study method spurred you on to read material beyond that presented in class?
7. To what extent have you engaged in any additional discussion of the issues beyond the classroom?

The final page of the questionnaire provided students with the

opportunity to give more open-ended feedback on teaching with cases. Students were asked for recommendations on further use of the method in social studies and in other academic areas. Questions were presented in a manner consistent with Bogdan's (1975, p.57) recommendation that the wording of the questions allow students to "talk about what is on their mind and what is of concern to them without forcing them to respond to the observer's interest, concerns or preconceptions."

The student questionnaire asked students to assess change quantitatively based on a five point scale. Students were also asked to provide examples that supported the quantification. In Building Theories from Case Study Research, Eisenhardt (1989) suggests that the combination of qualitative and quantitative data can be "highly synergistic" and that qualitative measures are useful in identifying relationships that may be difficult to extract from quantitative data. Once relationships have been identified quantitatively, qualitative data are useful for understanding these relationships.

While the data collected from the student questionnaire are intended to provide insight into students' perspectives on teaching with cases, the following limitations are recognized:

When using student questionnaires in qualitative analysis, Crossley and Vulliamy (1984) suggest that questionnaires are prone to produce rhetoric and that respondents of questionnaires are often "unwilling to admit failure for fear they will be partly blamed for them."

The open format and democratic environment fundamental to effective teaching with cases may affect teacher/student relationships. It may be difficult for students to draw a clear distinction between factors of

influence that lie outside the methodology and those that are an inherent part of teaching with cases. These limitations are acknowledged and it is expected that they will be mitigated by the triangulation procedures.

While students were encouraged to be honest in their evaluations the fact that they were allowed to respond anonymously is likely to contribute to the authenticity of their responses. The questionnaire was issued after final grades had been determined for the semester, so that students' responses would not be influenced by the burden of grades.

This data gathering instrument sought to assess perceived changes in students' behavior and attitudes that might be attributable to their work with cases (Appendix C). The data from these questionnaires provided insight into the learners' perspectives about case teaching as well as into how students perceive their own learning and the factors that affect this learning. These data are presented and analyzed in Chapter 4.

Audio Tape Analysis

A second source of data comes from the analysis of audio tapes made during the small group discussions of the case process. Consistent with the process of case teaching, students worked in small study groups while examining the study questions that complement each case. While the students were permitted to choose their own study groups, it was requested that, for continuity of data, one group stay together for the duration of the semester. The first group of students to give unanimous consent to this procedure was chosen. Permission to tape the group discussions was

secured and anonymity assured. A total of four group discussions were taped during this semester in this group of four students, two male and two female. The dialogue from the first tape and the last tape of the semester have been analyzed for:

- students' willingness to re-examine initially stated positions in light of additional information or alternative perspectives shared during the group interactions
- students' acknowledgment of other views, attitudes and beliefs
- the collaborative building of ideas by the group
- students' defense of position statements that polarize discussions
- the number or type of "subtractive" statements made during group discussion.

The first tape was recorded during the second week of classes in September. It is twenty minutes long and is based on a written case. The last tape was recorded in January at the end of the semester. It is fifteen minutes long and based on a video case.

This analysis is presented in Chapter 4.

The small number of students in the group being taped increase the risk of what Bogden and Biklen (1982) refer to as "observer effect." Observer

effect is described as the influence of being observed during data collection. An attempt to reduce observer effect was made by leaving the group on their own to set up the tape machine and record the sessions. At no point during the taping was the researcher involved or visible to the group.

Teacher Interview

A one hour interview was held with the classroom teacher in his office at the end of the semester. Permission to tape the interview was secured.

The interview offered an opportunity for frank discussion of issues deemed important to the teacher as well as some direct inquiry that focused on the behaviors assessed in the student questionnaire. In the latter, the teacher was asked to respond to the following questions:

1. How has the use of the case study method effected the students ability to:
 - a) examine complicated issues in a critical way?
 - b) communicate their ideas?
 - c) make good decisions?
 - d) recognize the views, attitudes and beliefs of other students?

2. Discuss what you consider to be the effect of case teaching on student curiosity and general interest in learning. What evidence can you share that support your comments?

3. Would you support further use of the case study method in social

studies instruction? Would you recommend its use in other subject areas?

4. What additional feedback on the use of the case study method would you like to provide that has not been addressed in this interview?

As part of the triangulation of findings, data from the teacher interview were analyzed with reference to the changes described in the student questionnaire and to the interactive behaviors examined in the dialogue transcribed from the audiotapes.

The same limitations that may influence student evaluation of teaching with cases may apply to the teacher's assessment of the process. Teachers may evaluate their performance while teaching with cases rather than evaluate the process of case teaching. The teacher selected for this case study had invested substantial time and energy in the Centennial High School Project. This commitment, as well as the attention that may be drawn to the teachers from the educational community may also affect evaluation. While these limitations exist and are acknowledged for the individual data gathering techniques, the limitations may be mitigated by the effects of studying the data through methods of triangulation.

Integrative Analysis

Data for this study were synthesized through an integrative examination of common themes and characteristics identified during the cumulative analysis of the student questionnaire, discussion tapes and the teacher interview.

Responses to each question in the student questionnaire were analyzed and categorized. The response clusters were then examined in relationship to the quantitative data.

The group discussion tapes were then coded for responses that support or contradict statements on behavioral changes made in the questionnaire. Frequency of facilitative, subtractive and challenging statements were examined. The number and type of questions asked during the group discussions were examined for their affects on student dialogue.

Data from the teacher interview were examined in relationship to the specific goal statements identified in this study. How did the teacher perceive the changes indicated by the student questionnaire and behaviors demonstrated in the group discussion?

The integrative analysis ends with an examination of the consistencies and contractions in the cumulative data in relationship to the literature on case teaching.

Chapter three examined the research methodology used in gathering data for this study. It provided an overview of teaching with cases through an examination of the Centennial High School Project, including teacher training and implementation. Case study as an appropriate research methodology was examined as were its limitations, and qualitative and quantitative aspects of data collection were described.

Chapter four presents and analyzes the data collected through student questionnaires, taped discussions and the teacher interview.

Footnotes

1. The pseudonym of Allan Lauren is used to protect the anonymity of the teacher and students selected for the single site case study.

CHAPTER 4

FINDINGS

This study has sought to examine the relationship between teaching with cases and the development of knowledge, skills, and attitudes in grade eleven Social Studies.

Chapter four examines the data and presents a summary of the findings in this study. The findings come from data gathered in a student questionnaire, taped group discussions and a taped interview with the classroom teacher. The data and findings are presented in that order.

Student Questionnaire

In the student questionnaire, students assessed perceived behavioral changes in themselves on a five-point scale. They also provided supporting examples that described these changes.

All twenty-seven students returned the questionnaire. The five-point quantitative assessment was completed by all students. Twenty-six students gave anecdotal support for their quantitative ratings.

Student responses to each of the eight questions in the questionnaire are examined for each question. The quantitative data are presented in bar graph format and they follow the summary of supporting comments.

Question #1

HOW HAS THE USE OF THE CASE STUDY METHOD AFFECTED YOUR ABILITY TO EXAMINE COMPLICATED ISSUES IN A CRITICAL WAY?

Twenty-six of the twenty seven students in the study perceived the level of change in their ability to examine complicated issues in a critical way as moderate to dramatic (see Table 1).

One student perceived there to be no change on this dimension. The supporting comment made by this student, "I act and think the same way when I'm a case study or not" suggests that the student may have evaluated his or her performance in a case method context rather than evaluating changes to his or her behavior that might have occurred from case method teaching.

The remaining students attributed the indicated measure of change to group work, the classroom environment and specific elements of learning through process.

Sixty percent of students referred directly to group work and the opportunity to listen to the ideas and views of other students as a central factor in their change. Students suggested that the opportunity to listen to other points of view, "gives you a lot of new ideas and a better understanding of the topic" and that it also allows you "step back and look at issues unbiasedly." Students felt they could view issues from "two points of view" and suggested that being able to share opinions "makes difficult issues more comfortable to deal with."

Fifty percent of the students who assessed their change as moderate, and thirty seven percent of those indicating dramatic change in their

ability to examine critical issues identified learning environment as important. They described the learning environment with case teaching as non-threatening and fair, with less pressure.

Those students who perceived dramatic change in their critical thinking referred more frequently to certain elements within the process as factors in their change. For example, they identified the opportunity to "figure it out for yourself," less memorization and more discussion as important.

A number of students described the following changes in their behavior, without further explanations:

- learned to listen to the other students
- had a better understanding of the issues
- were more involved
- not as opinionated
- would rather discuss than argue now

Responses to this question suggest that twenty-six of students perceived a moderate to dramatic change in their ability to examine complicated issues in a critical way. This change was attributed largely to opportunities for group work, and to the conditions of fairness and safety in the case method learning environment.

QUESTION 1:
**How has the use of the case study method affected
your ability to examine complicated issues in a
critical way?**

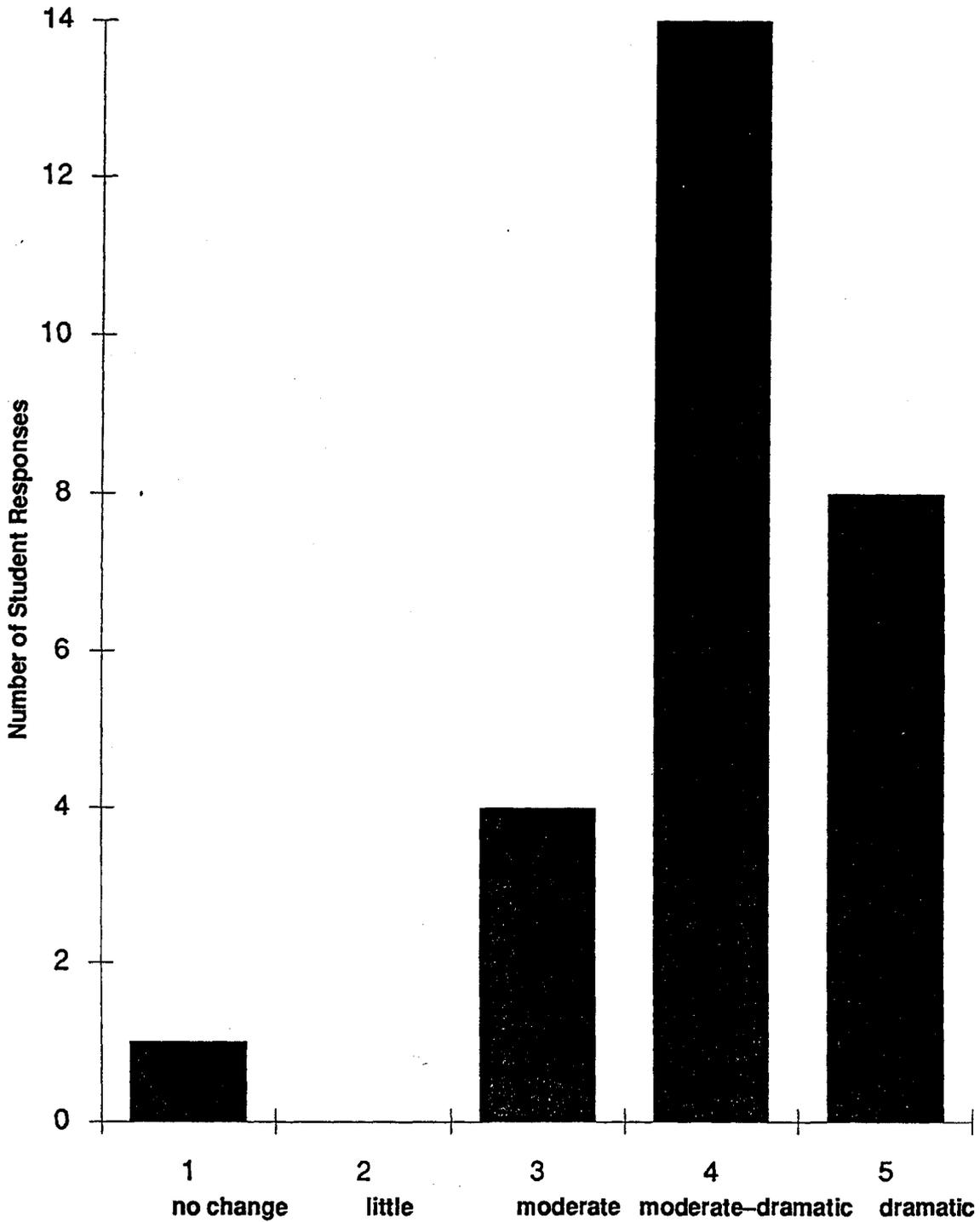


TABLE 1

Question #2

HOW HAS YOUR ABILITY TO COMMUNICATE YOUR IDEAS BEEN AFFECTED BY THE CASE STUDY PROCESS?

Twenty-three of the twenty seven students in the study sample (85%) indicated a moderate to dramatic change in their ability to communicate their ideas (see Table 2).

Four students (15%) indicated little or no change in this area. Of these students one felt that he/she had always been a strong communicator and therefore recognized no real change over the course of the semester. Another student felt his/her ability to communicate was related more to the issue being discussed than to overall growth.

Thirty-five percent of the students who assessed their level of change as moderate to dramatic attributed that change to the facts, opinions and views that are shared during the case teaching process. They suggested sharing of ideas "gives you more to think about" and "provides an opportunity to examine issues from all sides before speaking." Another 35% of the students in this category described the case method as "comfortable." Students described themselves as "not as shy" when sharing ideas because "everyone is involved in the discussion." Knowing their contributions would not be judged reduced the pressure and made communication easier for some.

Two students attributed the perceived change in their communication ability to the amount of time built into the case teaching process for thinking about and discussing the issues.

Several students identified changes in their behavior, without further

explanations. These descriptions include:

- I am generally pretty quiet but I did open up more with case studies.
- I listen to others better now before I respond. I respond to what they say and am not forming my next sentence in my mind before I've heard everything they have to say.
- I am becoming more comfortable expressing my opinions out loud in the class.

Responses to this question suggest that twenty-three students perceived a moderate to dramatic change in their ability to communicate their ideas in the context of the case process. Students attributed this change to the opportunity to discuss issues within a non-judgmental learning environment.

**QUESTION 2:
How has your ability to communicate your ideas
been affected by the case study process?**

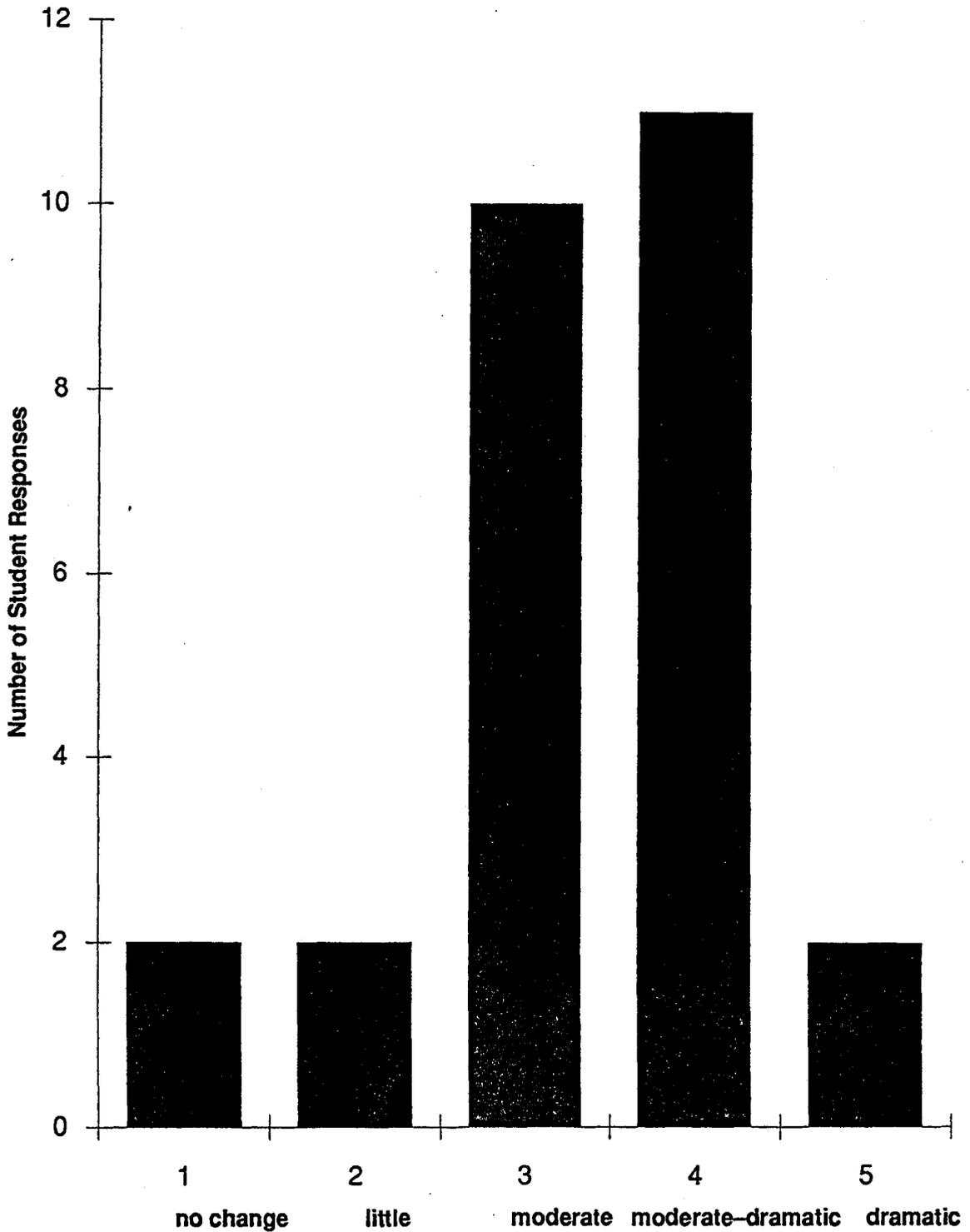


TABLE 2

Question 3

SINCE THE INTRODUCTION OF THE CASE STUDY METHOD WHAT KINDS OF CHANGE HAVE YOU NOTICED IN YOUR ABILITY TO MAKE GOOD DECISIONS?

Seven of the the twenty-seven students (26%) in the study perceived little or no change in their ability to make good decisions. They viewed themselves as good decision makers before the introduction of case teaching and suggested that the method did little to change their ability in this area.

Twenty of the twenty-seven students (74%) perceived a moderate to dramatic level of change in decision making ability. Of this group 30% specifically referred to their ability to view issues from other perspectives as central to the change (see Table 3). One student described the change:

After hearing other people's opinions in class you get a better idea of what is going on. It helps a lot in making decisions. It has helped me out of class because instead of fighting or arguing with someone because of conflicting views you learn to listen to both sides.

Students suggested case teaching encouraged them to consider the impact of their decisions on others, to "consider other people's opinions before coming to a decision" and to "analyze the pros and cons of a issue."

A number of students described the following changes in behavior:

- Now I care more and think more before I voice my opinions
- I am more aware of issues
- I am more open minded

- I have started to use this way of thinking in my everyday decisions.
- I think before I jump in head first.

Student responses to this question suggest that students perceived a change in decision making ability through the case process. The method enabled students to listen to alternative points of view and to evaluate their thinking against those ideas expressed by other students. Students described themselves as more aware and open minded when making decisions.

QUESTION 3:
Since the introduction of the case study method
what kinds of change have you noticed
in your ability to make good decisions?

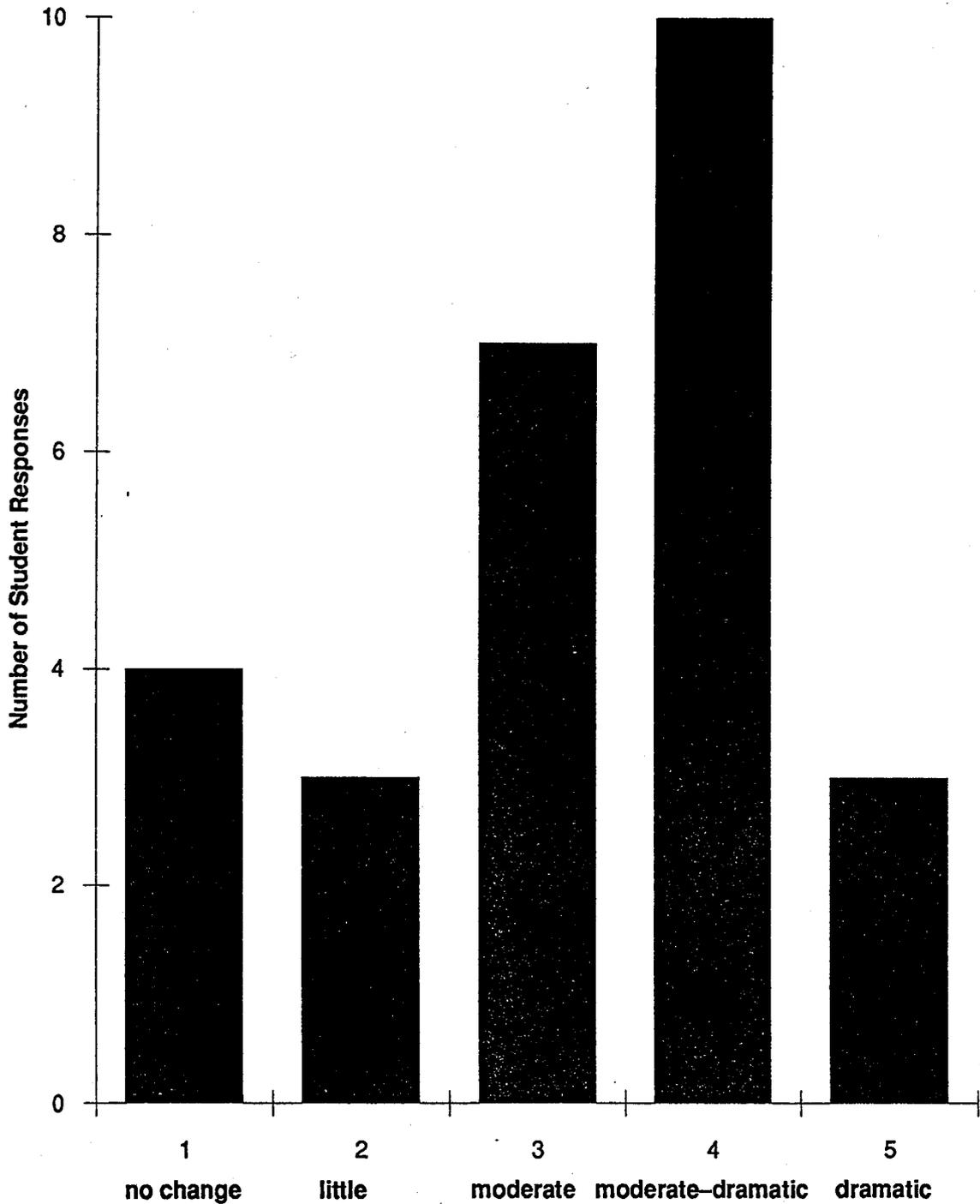


TABLE 3

Question #4

WHAT EFFECT HAS THE CASE METHOD HAD ON YOUR LEVEL OF CURIOSITY AND GENERAL INTEREST IN LEARNING?

Two of the twenty-seven students in the study (7%), indicated little or no change in their level of curiosity or interest in learning with the case method. One student suggested he/she had always been curious and interested in learning and perceived no change in his/her behavior over the semester. The second student commented, "I only like to learn what I have an interest in. The case studies process provides a more enjoyable learning process." This comment does not relate to the question and therefore provides little insight into the student's perception of case teaching in relationship to curiosity and interest in learning.

Twenty-five students (93%) indicated moderate to dramatic change in their curiosity and interest in learning. Most-often mentioned as a factor in producing change was "an increased understanding of current events and world issues with the case method." They described the case method as fun, interesting and exciting and felt they were "learning" and not just "memorizing" information.

The second most-often mentioned factor contributing to change was the sharing of individual views inherent in the case teaching process. Students found their interest increased when issues were discussed with other students. "The discussion made me more curious. The ideas were coming from people I know, not just facts from a textbook." A de-emphasis on facts and textbooks were also viewed as important factors in this change. "This new method had me hooked from day one. You learn much more

information than a text could provide and it is a lot more exciting."

Students described the case study classroom as fun and the cases exciting. "Class is always fun and people look forward to coming. They are curious about what we will be doing and therefore learn much better."

Specific behavioral changes were described in the following ways:

- I now notice myself not being satisfied with one idea or answer. I have the drive to gather as much information as possible then make my own conclusion.
- I am more interested in listening to others.
- I wasn't very keen on learning. Now I am eager to learn as much as possible.
- I looked forward to coming to class... mentally we were doing much, much more and remembering much, much more.

Responses to this question suggest that the majority of students perceived significant change in their level of curiosity and general interest in learning. They attributed this change to the nature of case material and the opportunity to discuss issues with other students. They viewed case teaching as fun and exciting.

**QUESTION 4:
What effect has the case study method had
on your level of curiosity and general interest
in learning?**

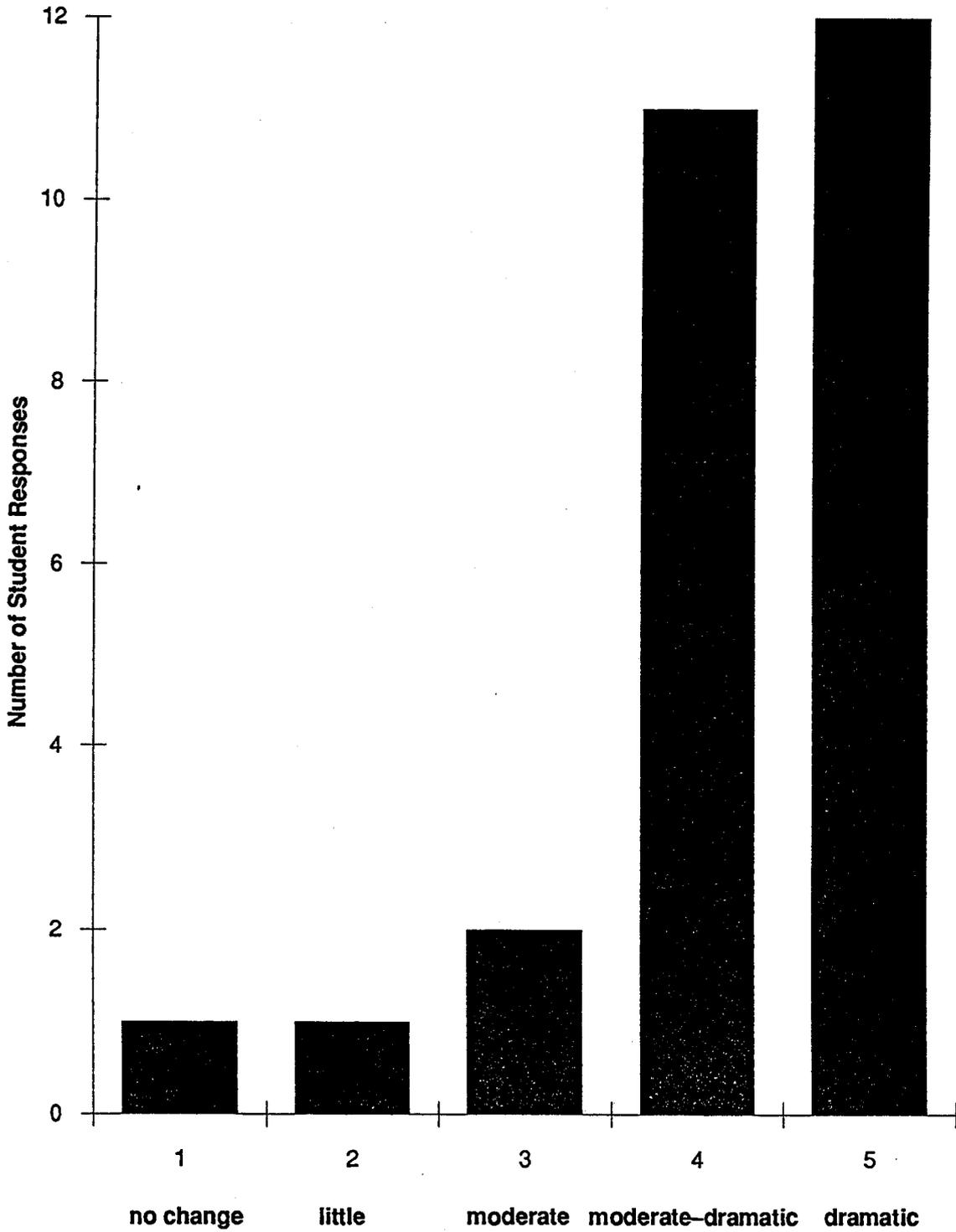


TABLE 4

Question #5

WHAT KINDS OF CHANGES HAVE YOU NOTICED IN THE LEVEL OF RESPECT YOU HAVE FOR THE DIFFERENT VIEWS, ATTITUDES AND BELIEFS HELD BY OTHER STUDENTS?

Twenty-four of twenty seven students in the study sample (89%) indicated a moderate to dramatic level of change in the level of respect they have for different views, attitudes, and beliefs held by other students. Three students indicated little or no change in this area. They felt they had developed a respect for differences in these areas before their experience with case teaching (see Table 5).

Twelve students perceived a dramatic change in the level of respect they have for student differences. Students in this group referred almost exclusively to the sharing of ideas and opinions in the group as the primary factor in this change. They considered the opportunity to hear how people felt without having ideas judged as right or wrong as important. They perceived the case teaching classroom as a place where "there are no put downs and no one laughs at your ideas."

Students suggested the case method allowed them to recognize that "everyone's point of view has value" and that no one opinion is right" and that "everyone has the right to their own opinion and should be respected for that." This change was consistently attributed to the opportunities for discussion with the case method.

Students described the changes in their behavior in the following ways:

- I accept other peoples views and I don't discriminate

- I never knew before the effect that some opinions had on people's feelings. Now that I realize this I am careful with what I am saying, in and out of class.

Responses to this question suggest that the majority of students perceive change in the level of respect they have for the different views, attitudes and beliefs held by other students through the case process. Students described themselves as more sensitive to others' thoughts and ideas as well as having increased awareness of the effect that some opinions and attitudes may have on some students.

QUESTION 5:
What kinds of changes have you noticed
in the level of respect you have for the
different views, attitudes and beliefs
held by other students?

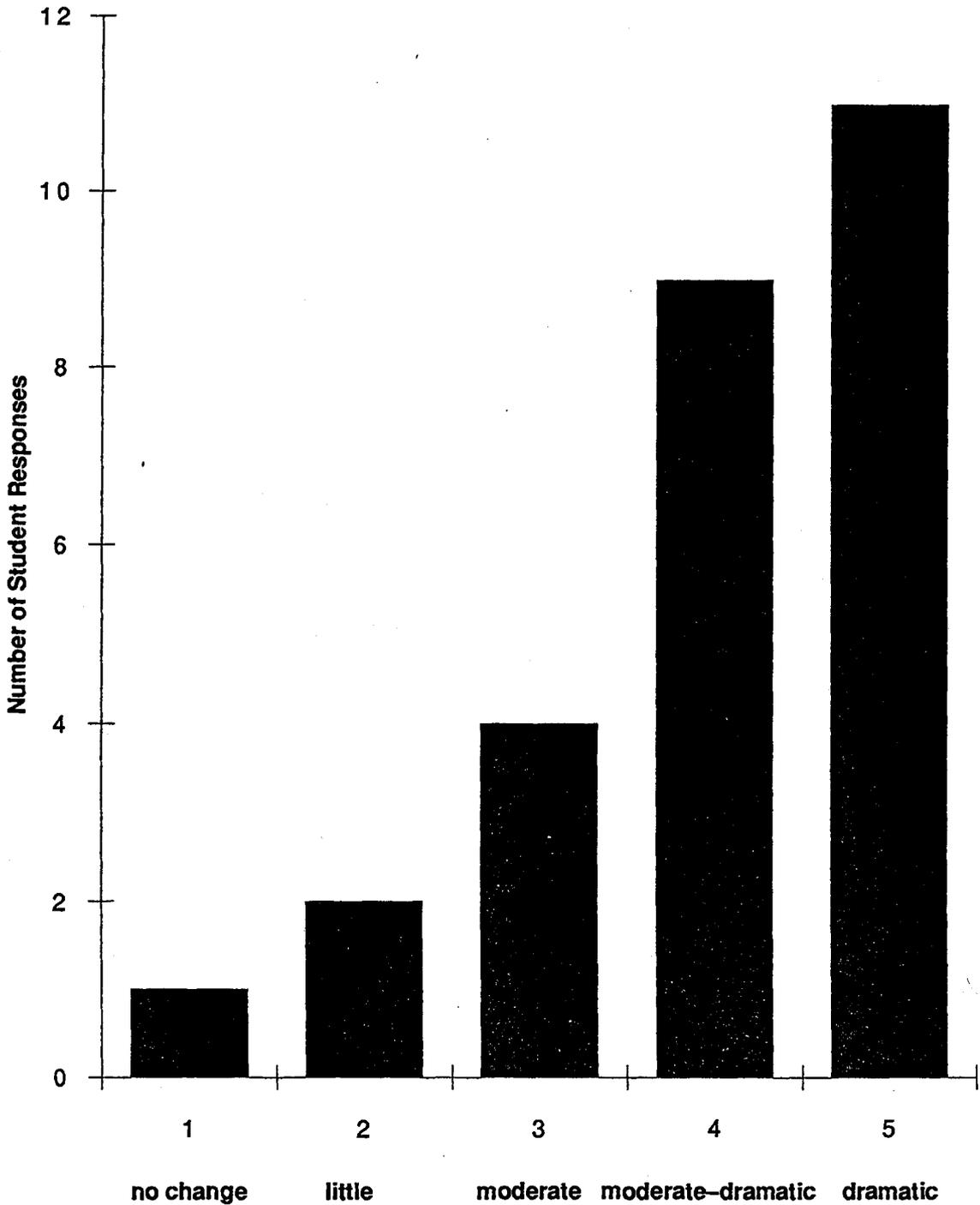


TABLE 5

Question #6

TO WHAT EXTENT HAS THE CASE STUDY METHOD SPURRED YOU ON TO READ MATERIAL BEYOND THOSE PRESENTED IN CLASS?

Thirteen of the twenty-seven students in the study (48%) indicated little or no difference in the amount of material they read outside of those materials presented in class during the semester of case method teaching. Students in this group suggested that there was little or no time in their schedule to read material beyond what was specifically assigned in their courses. In addition to time constraints they identified the group discussion as an important component in the case method and suggested that additional reading outside of this group process would not be as interesting.

Fourteen students (52%) indicated a moderate to dramatic level of change in this area. Most identified television news and newspapers as primary sources of additional information. The extent of change for these students was related to personal interest in particular case issues. Those that claimed the greatest extent of change described wanting to "get involved in certain issues" and to read more about "what has stirred my interest." One student felt that, "if an issue really interested me and I felt that it had some impact on my life or society around me then I would investigate all the more."

Students described the following changes in their behavior:

- I didn't really enjoy watching the news or reading a newspaper but now I find it interests me and it bothers me if I don't know what's going on in the

world.

- I believe I read the newspaper more and listen to the news more carefully.
- Now I want to get involved in certain issues.

Responses to this question indicate that almost half of the students feel they have little time in their schedules to read material beyond those presented in class. Responses also indicate that while students felt under tight time constraints, 50% would read additional material if the issue under investigation was particularly relevant or interesting to them. Those that did extend their reading outside the class identified the television news and the newspaper as primary sources of further information.

QUESTION 6:
**To what extent has the case study method
spurred you on to read material beyond those
presented in class?**

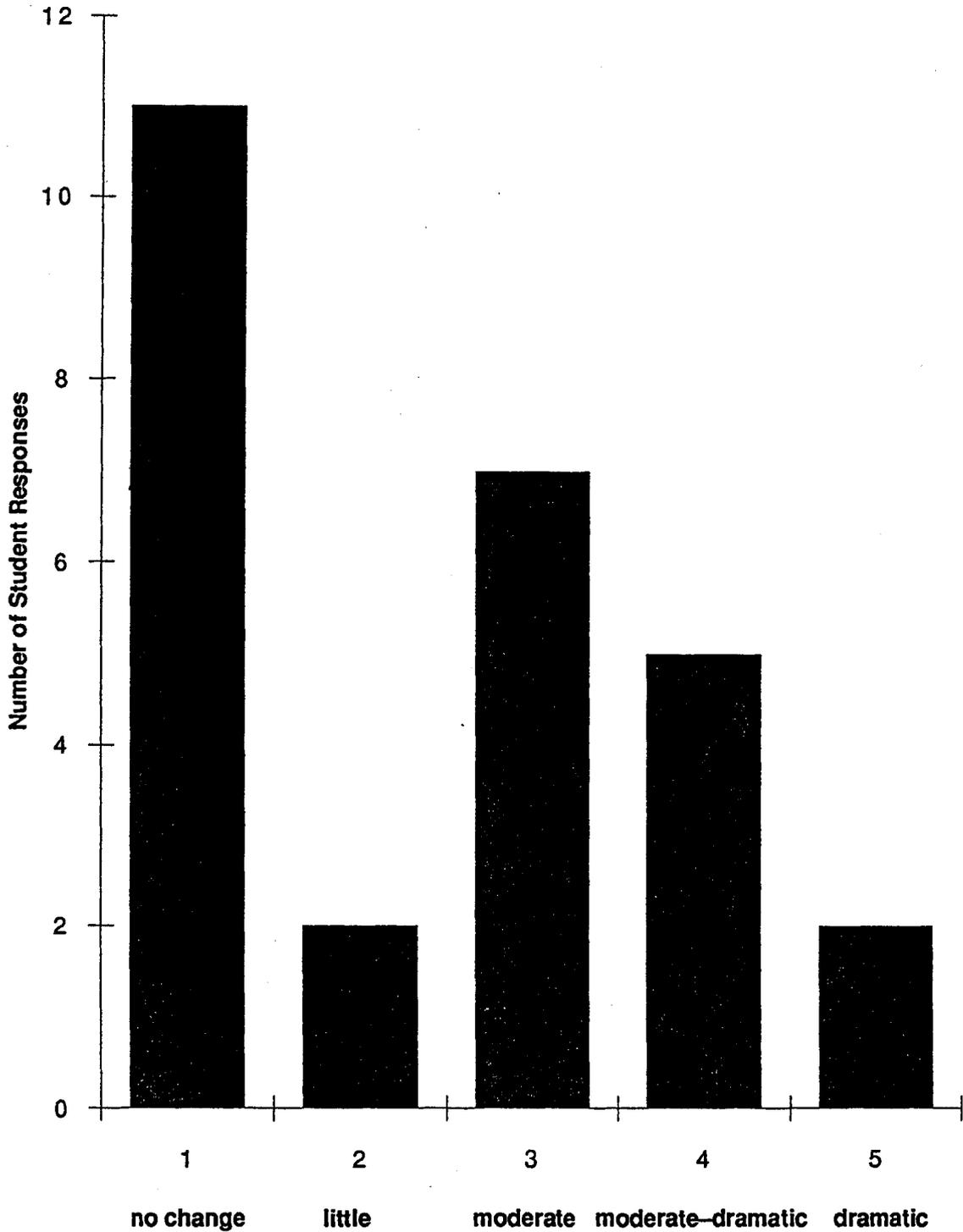


TABLE 6

Question 7

TO WHAT EXTENT HAVE YOU ENGAGED IN ANY ADDITIONAL DISCUSSION OF THE ISSUES BEYOND THE CLASSROOM?

Three of the twenty-seven students in the study (11%) indicated little or no change in the extent to which they engaged in additional discussions outside the classroom. They did not offer supporting explanations. Twenty-four students (89%) indicated a moderate to dramatic level of change in the extent to which they discussed issues beyond the classroom (see Table 7). Additional discussions were carried out with both friends and families. Changes were attributed to opportunity to discuss relevant issues, "I would say that more of the controversial issues have been discussed because they are part of society and what's going on," the controversial nature of many cases, and an increased confidence in sharing ideas. "Since we had the debate in class I found I had a lot of knowledge and information to back up my arguments."

One student suggested that in-class time constraints may have contributed to increased discussion outside of class. "The fact that all points of view cannot be raised in an hour and a half keeps the discussion going outside the class."

Responses to this question suggest that case method teaching does have a significant impact on the extent to which students engage in the additional discussion of issues beyond the classroom. Students suggest that out of class discussions are influenced by the relevance of the case material, the level of controversy in a case issue as well as the increased level of confidence that develops when opportunities to discuss ideas are part of the learning process.

QUESTION 7:
**To what extent have you engaged
in any additional discussions of
the issues beyond the classroom?**

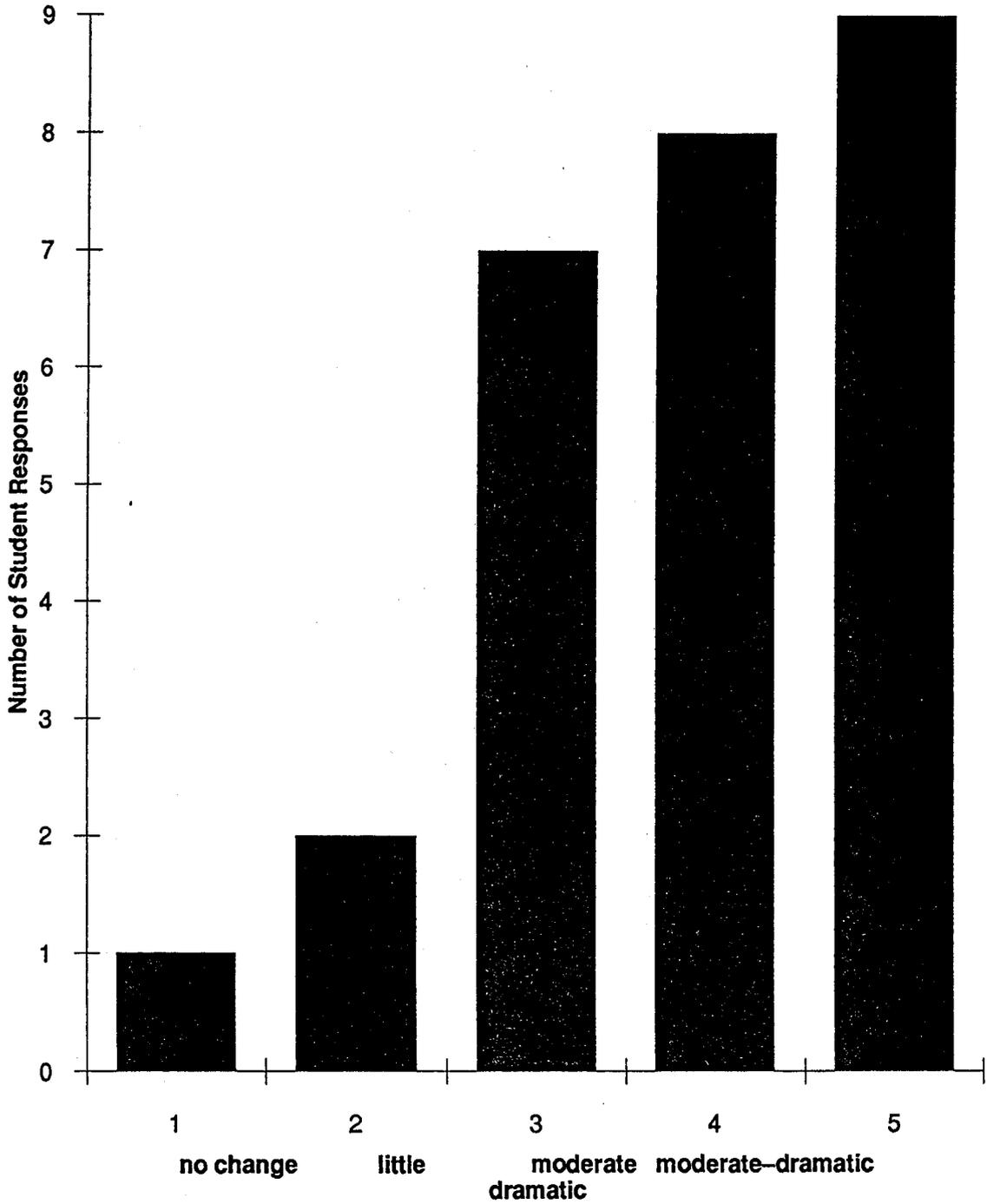


TABLE 7

Additional Feedback

Twenty-six of the twenty seven students in the study provided additional feedback on the case study method when asked:

PLEASE USE THE SPACE PROVIDED TO GIVE ADDITIONAL FEEDBACK ON THE USE OF THE CASE STUDY METHOD THAT HAS NOT BEEN ADDRESSED IN THE QUESTIONNAIRE. WOULD YOU SUPPORT FURTHER USE OF THE METHOD IN SOCIAL STUDIES INSTRUCTION? WOULD YOU RECOMMEND IT'S USE IN OTHER SUBJECT AREAS?

All twenty-six students perceived case method teaching as positive. While most students made general comments on the case teaching process, "by all means it's the best way of teaching" and " I really support this method of teaching," twelve students made specific reference to case teaching in social studies. These students gave unanimous support for the continued use of case teaching in social studies. " Yes, I vote totally for the use of the case study method. I have never learned so much in a socials class."

While giving an overall positive assessment of case teaching, one student did suggest changes to the group discussion phase of the process, describing the groups as having some difficulty sticking to the topic under discussion.

Thirteen students made direct reference to case teaching in other subject areas. Eleven of the thirteen in this group gave support for the method across all curriculum areas with law, English, math and auto mechanics identified as particularly appropriate.

Two students indicated support for case method teaching in most subject areas with some reservations about its application in chemistry and math. Two students qualified their support of case method teaching by suggesting that the success of the method may depend on the teacher rather than subject area.

For example:

I believe case teaching is very effective but I don't know if it would be very effective with a more traditional teacher. You have to have everyone willing to speak freely and if the teacher wants everything in its right place, kicks students out for talking out of turn, or in general can't handle the change required I don't know if it would be very effective.

Three students made specific suggestions for change. They suggested that the groups be determined by the teacher and should be changed periodically. The "negativity" of social issues examined in most cases was of concern to one student who thought that the positive events in history should also be examined.

Response to this question indicates general support for teaching by the case method. Support for the method in social studies and in other subject areas was made with some exceptions and some qualifications.

Summary of Student Responses

This summary of student responses to the student questionnaire is followed by a graphic presentation of the data calculated as class averages (see Table 8).

The data identify four areas in which students perceived a moderate to dramatic degree of change. These areas are: critical thinking, interest and curiosity in learning, respect for other's views, attitudes and beliefs and the extent to which issues were discussed outside the classroom.

Students perceived change in the moderate range in three areas. These are: ability to make good decisions, ability to communicate ideas and the extent to which material was read outside the classroom.

The feature of case teaching most often identified as a key contributing factor to change in all areas is the opportunity for group discussion of the issues. Students suggested that the group discussions provided opportunities to share ideas, examine issues and formulate personal positions on complicated issues. It allowed students to hear from other students and consider their perspectives in decision making. Students consistently recognized the value of this aspect of the case method for generating interest and curiosity in learning.

Summary of Data
from Student Questionnaires
Expressed as Class Averages

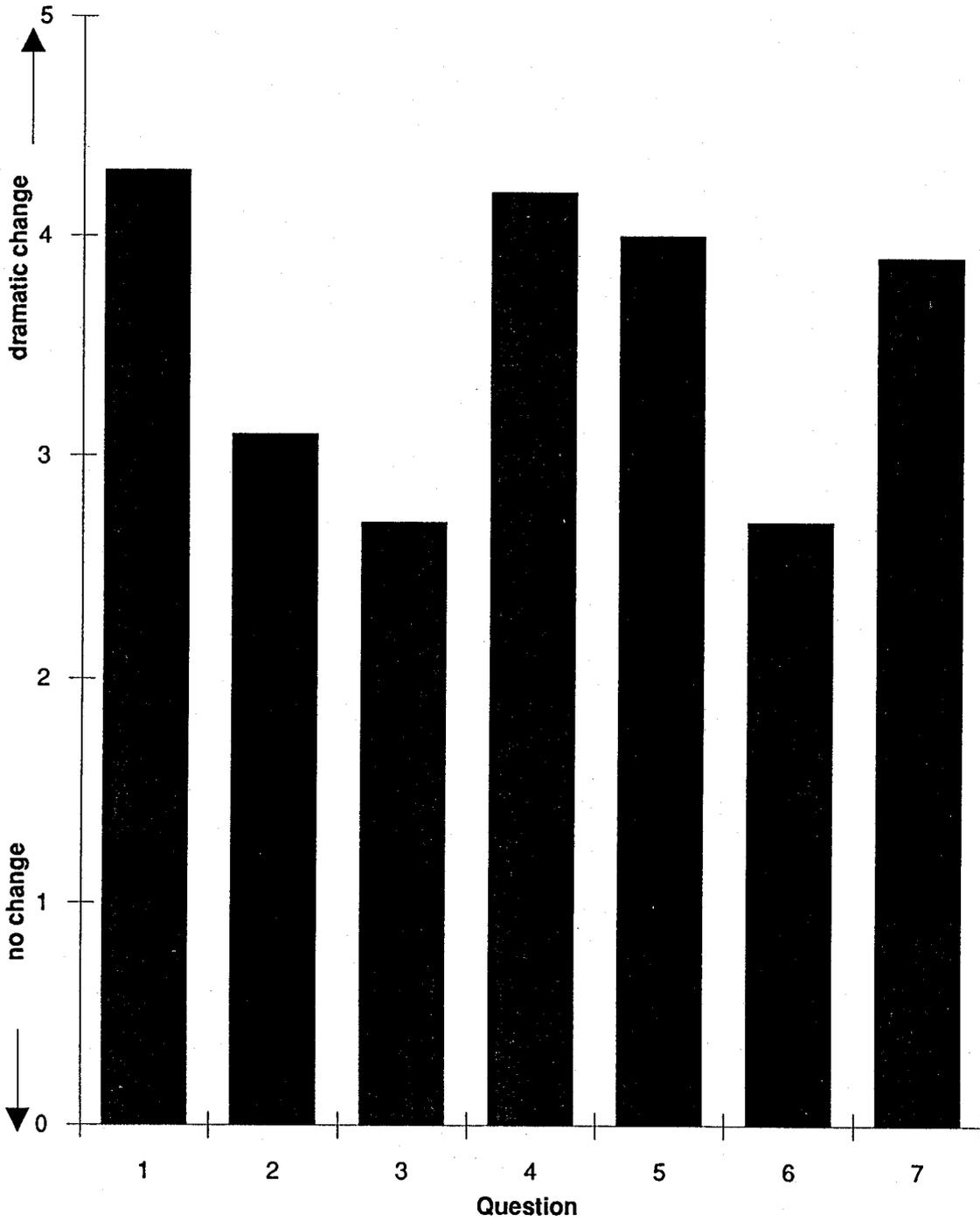


TABLE 8

Audio Tape Analysis

Two audio tapes were analyzed to discover how students were able to build collaborative ideas, acknowledge the views, attitudes and beliefs of other students and re-examine personal positions when exposed to new information during the group discussion component of case teaching. The polarization of ideas and the use of "subtractive" statements were also examined. Responses were coded following the examples on Coding Sheet T-2 (see Appendix D).

The first tape was recorded during the second week of classes in September and is twenty minutes long. The second tape, recorded at the end of term, is fifteen minutes long.

Tape 1

Analysis of the first tape identifies a discernable trend in the group discussion, that may be described as "ideas sharing". During the twenty minute session students discussed five study questions. During the discussion of the first four questions a similar pattern of dialogue was followed. The same male student started the discussion by reading the question. This was followed by a second student stating his or her position on the issue. The discussion proceeded with a series of idea statements that were contributed by all students, and that built on the first idea. New ideas were added with little questioning, challenging or polarizing ideas. The following is an example of this type of "idea sharing" dialogue:

M2 It's very extreme because people are willing to give all their

values to cheat and lie to get money.

F1 Material wealth is taking over the priority of values.

F1 It is almost a popularity contest

M1 And once someone has all this material wealth they don't want to hang out with anybody that doesn't.

M2 They think they are higher.

There was disagreement expressed on four separate occasions during the discussion of the first four questions. Two points of disagreement were the result of one student having misunderstood the questions. When the questions were re-read the disagreement was resolved and the discussion resumed the established pattern of idea sharing. During a third point of disagreement one student softened his position on an issue after being challenged by another student. The fourth statement of disagreement went unacknowledged by the group.

During the group discussion of the first four questions there was one facilitative exchange of information. In this exchange one response was followed by a paraphrasing statement. The paraphrasing lead to a restatement of the ideas using stronger language:

M1 We don't loose values. It's just that the values are different. Material wealth is valued now.

M2 Values aren't lost. They are just changed.

M3 Dramatically

During this segment of the tape one subtractive statement was coded when a student was told to "shut up." One question was asked. The question, "Ya, But she did. Right?" was asked in a condescending tone and viewed as non-facilitative.

The fifth question discussed on this tape asked students to relate the issues in the case to conditions in the 1990s. During this discussion the pattern of dialogue changed. The same student read the question, followed by a sharing of ideas by two other students. The issues raised in the question focused on the differences between male and female employees and their ability to perform specific tasks. The discussion was polarized along lines of gender, with the male taking one position and the female another. During the discussion a male student was asked to support his statements with additional data:

F1 Women have physical attributes that won't let them do some of the things that men do. You're not going to see a lot of women on a construction site lifting lumber.

M1 They could do it. They just do not want to do it. They want all the pressy jobs.

F2 How do you know women do not want to work on these jobs?

In a second exchange:

M1 If you look at construction it is kind of fitted to the male build but there are jobs that most men can't do that women can but they don't want to.

F1 Like what? What can women do that men can't?

The discussion ended with the conflict unresolved and with no movement being made on the original positions taken. Even when the male students' arguments began to break down they continued to defend their position.

Analysis of the first tape revealed a series of non-challenging discussions. The discussion polarized only when students examined the issue in relationship to their own experience. The exchange of ideas during this polarization did not indicate an appreciation for individual differences in views, attitudes and beliefs and was viewed as non-facilitative.

Tape 2

Analysis of tape 2 identified the following changes in the discussion patterns compared to tape 1. During the 15 minute session students in tape 2 examined two study questions comprehensively and introduced a third.

The first question was read by a student. Students contributed ideas in a round robin, with each member taking a turn. During the second round of

discussion one student reflected back on the idea contributed before her and examined it in relationship to the original question. During this facilitative exchange one student helped another clarify the intent of the question.

F2 They censor movies. Make them X-rated and stuff.

M2 But, I think with this he means ...

F2 Oh, Oh, O.K.

From this point the discussion was characterized by a series of questions that:

a) Asked for more information:

F2 What could you say about lyrics?

M2 Sometimes in an LG 73 song they change the lyrics. They cut out the words with sort of a gap.

F1 Have you ever heard that?

M2 Ya. Two Live Crew ... The songs are re-written totally and some words are added.

b) Asked for clarification of ideas:

F2 Ya, But why do they do it though?

F1 In Canada they don't have age limits.

F2 I don't understand what words can do. Ya know?

c) Invited further examination of the issues:

F1 Did you notice that when he was talking everybody was doing what he was saying?

Discussion of the second study question began with a reading of the question similar to that in the first question. A second student responded to the question with a strong opinion statement that was followed by a question. The question provided an opportunity for the first speaker to clarify his position.

M1 That's stupid

F1 What? You don't agree with that?

M1 That's what democracy is. It's letting people speak.

M2 Yes, we disagree with this statement.

There were no polarized discussions, although the final two statements made in relationship to the issues raised in question two did indicate a difference of opinion.

M2 I think the purpose of censorship is to protect the underaged.

M1 I think it is to protect morality and society.

The reading of question three by one student was followed by one

statement of agreement and two questions. The questions remained unanswered when the session ended.

M1 That's like against censorship. Right?

F1 Having censorship and putting a law against this is that the same thing?

There were a number of facilitative exchanges made during the second tape that indicated a sense of value for the contributions made by other students. In the example provided the first student restated his original idea with emphasis after a second student paraphrased his statement, holding it up for re-examination.

M2 Only a few individuals who had the opportunity to speak and get their opinion across to the general society... and they think they are speaking for everybody else.

F2 So, those in power think their beliefs are supported by the community.

M2 People in the community have the opportunity.

The second tape was characterized by eighteen questions that asked for clarification, more information or a further examination of the issues. There were no subtractive statements or challenging exchanges.

Summary of the data from the Audiotapes

When the group study session taped at the beginning of the semester was compared to the session taped after one semester of case teaching, differences were recognized in the amount of time students spent discussing each issue and in the level of facilitative exchange during these discussions.

Students took more time to discuss each question at the end of the semester: five questions in 20 minutes during the first session compared to 2 questions in 15 minutes during the second.

The end of the semester discussions were not only longer but they were characteristically different from those at the beginning of the term. The first discussion session was seen as non-facilitative. Students did not ask questions; they responded infrequently to comments made by other students; and during a polarized discussion were unwilling to re-examine their position in response to new information. During the second tape students were more facilitative, frequently asking questions that would initiate a re-examination of the issues being discussed. Students were more willing to re-evaluate their position on an issue in the second tape.

Student involvement in the group discussion increased during the first tape when students were asked to reflect on their own experience. The importance of relating the issues under discussion to their own experience were highlighted in both tapes. Students used the time the group recorder used to transcribe the main points of the discussion to examine the issues in relationship to their own experience:

"I remember one year..."

"Don't you just love it when..."

These data seem to be consistent with the quantitative assessment and anecdotal responses presented in the student questionnaires. They suggest an increase in respect for individual differences, critical thinking and the ability to make good decisions based on an exposure to alternative perspectives during the group discussion component of case teaching.

Teacher Interview

An interview with the classroom teacher constituted the third aspect of data collection in this project. During the interview Allan Lauren was asked to describe his experiences with the case method of teaching. He was specifically asked to describe what he saw as changes in student behavior that reflect the goal statements under examination in this study.

One of the most critical aspects of the case method, according to Lauren, is the opportunity group discussion provides for students to develop listening skills. He suggested that students "listen to other students, hear many ideas and get a larger, more global picture of an issue" when taught by the case method. It makes students more aware of the feelings and ideas of other students and better able to perceive the meaning of statements made by others.

Lauren described the case method as forcing students to think about issues from many different perspectives. According to Lauren, "students in grade eleven are only concerned with their own opinion and by listening to other people's ideas, it allows them to be exposed to many different perspectives," often perspectives that they had not thought of or even conceived of before. In his view, case method teaching forces students to "examine their own beliefs and get a better understanding of the issue." He found that students in his class become less judgmental.

Lauren found that students would participate more in class discussion once they began to realize that their ideas were not being judged. The communication was "slow to start" but became more "comfortable" as the semester developed. Quiet students found that when they made a comment

it was accepted. As the semester progressed Lauren found that the students became very comfortable in expressing their viewpoints and he contends that when students feel safe sharing ideas they are "willing to exchange ideas on any subject in a meaningful and caring way."

When asked to describe specific changes in student behavior, Lauren indicated that he found students were more aware of other people's feelings, more "tolerant of contrary data" and more willing to examine discrepant ideas.

When students worked with their ideas orally and in their written work, Lauren found them more able to interpret and use data to support their positions. He described students as being "not as muddled in their thinking."

As a result of the case method teaching Lauren felt that students left his class with a positive outlook about history, government and social issues. He perceived that students had a sense that there was a chance to solve problems. Student interest in the issues examined during the case method teaching process transferred to the work students did on individual and group projects. Lauren described student projects as the best he has seen in his eighteen years of teaching.

Over the course of the semester Lauren found that the class seemed to pull together. The classroom was "alive" and the students "involved." There was no evidence of "hostile or hidden feelings."

Lauren found that students took Social Studies outside the class into the hallway, the lunchroom and to the dinnertable. Feedback from parents confirmed for Lauren that what he was seeing in class was being extended to the home. Parents commented on the time their sons and daughters were willing to commit to their work in his class.

Based on his experience Allan Lauren recommended that the application of case method teaching be extended to other curricular areas. In his view "case teaching forces students to examine their beliefs and what is important to them and what they stand for and to hopefully see a connection between their beliefs and their actions."

Lauren attributes the change in students' attitudes and behaviors to the opportunity for students to discuss issues in a group, the safety factors in a case study classroom where ideas are not judged, and to the relevance of case teaching materials to student interest. In his view case teaching got students "fired up."

Allan Laurens perception of changes to student attitudes and behavior is consistent with, and supports the data gathered from the student questionnaires and the two audio tape analyses. He described students as more tolerant and understanding of the views, attitudes and beliefs of other students, more able to make good decisions based on the interpretation of data from a number of different sources, and more able to communicate their ideas both orally and in written form. His conversations with students and their parents confirmed that students did take their learning outside the classroom.

Chapter four presented the data collected through student questionnaires, taped discussions and the teacher interview. The relationships between the three sources was examined through a triangular analyses of the data.

Chapter five presents the conclusions that have been drawn from these data and examines their implications for future studies.

CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

This study has reviewed the historical development of teaching by the case method and examined theoretical support for process learning. It explored the issues of student attrition and related these to the potential of case method for addressing the needs of at-risk students. It also examined the relationship between the goals of the Graduation Program (Ministry of Education, 1990), the acquisition of knowledge, skills and attitudes and case method teaching through data gathered from student questionnaires, audio tape analysis of student dialogue and an interview with the classroom teacher.

While the limitations of observer participant data require caution in drawing conclusions, the data in this study nevertheless point to positive changes in student behavior in relationship to those specific goal statements under examination.

When case method teaching is examined in relationship to specific goal statements in the Graduation Program, the following conclusions may be drawn:

Intellectual Development

Data from this study suggest that the goals for intellectual development defined by the Ministry of Education as, i.e. ...

the ability of students to analyze critically, reason and think independently, and acquire basic learning skills and bodies of knowledge, to develop in students a lifelong appreciation of learning, a curiosity about the world around them and a capacity

for creative thought and expression. . .

... are met on a number of levels.

Students described the case method, and the opportunity it presented for discussion, as central to changes they perceived in their ability to examine issues critically. The classroom teacher found that students were more able to examine issues from different positions and make considered decisions based on the data presented. An increase in the amount of time students spent discussing specific issues through the semester further supports this change.

Students in this study felt better able to communicate their ideas. They attributed this to increasing confidence that came after a semester of sharing feelings and discussing ideas in their small groups and with the entire class. The development of communication skills demonstrated in the analysis of the group discussion was also recognized by the classroom teacher.

Relevance of the case materials and the opportunity to share personal opinions in relationship to issues of importance were considered by the students to be critical factors in the development of student curiosity. Students described cases as "exciting" and the teacher described his students as being "fired up." While analysis of the first tape revealed that students asked no questions during this discussion, analysis of the second tape revealed that eighteen questions were asked during the second.

The curiosity developed by students in case method teaching translated to increased involvement by students in the issues under investigation.

This was seen in the way students sought additional information through television and newspapers, with 89% of students discussing these issues beyond the classroom with friends and parents.

*Seeking
additional
information*

Human and Social Development

The goals for human and social development, as defined by the Ministry of Education are:

to develop in students a sense of self-worth and personal initiative; to develop an appreciation of the fine arts and an understanding of cultural heritage; to develop an understanding of the importance of physical health and well being; to develop a sense of social responsibility, and a tolerance and respect for the ideas and beliefs of others.

Case method teaching, as indicated by the data gathered in this study, provided the opportunity for students to appreciate the perspectives of other students. Students described themselves as "less opinionated" and more sensitive to the feelings of other students when making decisions or forming opinions. Student dialogue became more "facilitative" in that students took more initiative in asking questions and clarifying meaning. The classroom teacher described students as becoming more tolerant and better able to appreciate contrary views. He described the students in his class as becoming more aware of the feelings and ideas of other students and found them better able to perceive the meaning of statements made. He viewed them as less judgmental.

*appreciate
other
students'
perspective*

*more
sensitive*

*students
better able*

Data in this study suggest that students were more interested in

social and historical issues with the case method, and students gave case instruction in social studies strong endorsement. The teacher believed students had developed more positive attitudes toward history, government and social issues and had developed greater commitment to issues beyond the classroom with the case method.

more positive attitudes toward history

Principles of Learning

Data in this study identified a number of key components of case method teaching that were viewed as primary contributors to student learning. The specific behavioral changes identified in the student questionnaire, teacher interview and demonstrated in student dialogue show a strong relationship to the basic principles of learning articulated in the Year 2000 document (Ministry, 1990).

Data related to these principles include:

Learning is both an individual and a social process

Incidents where open, honest confrontation brings people's worlds together for a moment of sharing do more to sustain growth than any other single factor (Rogers, 1983, p. 231).

The group discussion component of case method teaching was the most frequently identified contributor to perceived behavioral changes in this study. Students viewed group discussion as central to changes in their critical thinking, decision making, communication of ideas, and

group discussion

respect for individual differences. Analysis of tapes indicated students' increase in the use of "facilitative" responses, and the classroom teacher identified group discussion as fundamental to the tolerance that ~~xxx~~ developed for alternative perspectives and viewpoints.

Learning requires the active participation of the learner. Active participation requires that the student find personal meaning in the activity and in the learning experience.

When students in this study were asked to identify those factors in case method teaching which contributed most to their increased involvement in social studies, they consistently referred to the nature of case materials. They identified cases as relevant. Social issues were examined historically as well as in relationship to their lives and to their future. Learning for these students appeared to have greater meaning. Students described changes in attitude and behavior that were related to their increased involvement with cases, including an increased interest in attending class, watching the news or reading the paper in order to better understand the issues presented, and discussing the cases under examination in their social studies class with friends and parents. They viewed themselves as a part of the process and not as outside observers viewing issues from a distance. The classroom teacher described students in his class as highly involved and committed to the issues presented.

People learn in a variety of ways, and at different rates.

Students described the case teaching environment as safe and fair. They felt their ideas were not judged as right or wrong and that their contributions had value. According to Allan Lauren, the comfort students felt, and their acceptance of individual differences were catalysts for the growing tolerance and respect he saw over the semester of case method teaching. In his view, the more safe students felt in the classroom, the more willing they were to contribute to discussions. The more involved students were in the discussions, the more "stake" they had in understanding the issues.

CAVEATS

Data from this study suggest that case method teaching, coupled with the use of materials and activities that complement and supplement the case itself, is effective in meeting specific educational goals and objectives in grade 11 Social Studies. While the data are encouraging, the limitations of the study are recognized.

The data gathered in this study were largely based on perceptions. Students were asked to make judgments about the changes they perceived in selves. The teacher was asked to make judgments about the changes he perceived in students. How valid are perceptions? How are they influenced? To what extent are we able to draw conclusions from these perceptions?

Interview and student questionnaires are a limited source of data because participants can only report their perceptions of and perspectives on what has happened. Those perspectives and perceptions are subject to

distortion due to factors such as personal bias, anger, anxiety, politics, and lack of awareness, to name a few. Interview and questionnaire data are also subject to recall error, reaction to the interviewer, and self serving responses (Patton, 1980).

While the analysis of audio taped discussions, as observational data, provide a check on what is reported in the teacher interview and student questionnaire, observations are also limited by their focus only on external behaviors. In this study the observational data are constrained by the limited sample of student behavior that was examined. With such a limited sample size it is difficult to determine the extent to which the observed behaviors are typical or atypical of other students in other settings.

The presence of an observer can certainly make a difference in how a program operates and in its outcomes. The fact that a study is being conducted may create a halo effect so that the teacher and students perform in an exemplary fashion. Long term observations that permit the observer and those being observed to become comfortable are advocated by qualitative methodologists to circumvent this problem (Patton, 1980). For these reasons the conclusions drawn from this study should be viewed in relationship to the study's limitations.

IMPLICATIONS

For practical reasons this study focused on selected goals and objectives, and while the relationship between case teaching and the goals examined have been addressed, many questions are raised. For example,

How does case method teaching attend to content issues? How does case method teaching affect long term learning? How effective would case method teaching be at other grade levels, in other schools, in other districts, in other curriculum areas?

In addition to questions of application are those that relate to the process of case method teaching. They include: How do case materials that reflect curriculum, both subject specific and interdisciplinary, affect learning? How does student behavior during group discussions and debriefing change over time? How is learning transferred from case analysis to independent projects that may be used as the basis for student evaluation?

In an attempt to address the primary impetus for the Year 2000 document one must ask: "How effective is case method teaching in reducing student attrition?" The literature on student attrition identifies a lack of involvement as characteristic of those who drop out of school. The relationship between case method teaching and student involvement identified in this study is encouraging and invites a closer examination of its application with high risk students at the secondary school level.

The attributes of case method teaching appear to have implications not only for students. The instructor's role in this kind of teaching differs in several respects from traditional practice. Teaching with cases is not so much to project information to students, as to encourage "meaning making." This shift in teaching emphasis affects a wide range of instructor activities, from preparing class material and planning class sessions to evaluation.

In addition to questions about the role of the teacher, student attrition, and the process of case method teaching are those that relate directly to future research in this field. They include:

What are the costs associated with case method teaching and how practical is the method for large numbers of students?

How appropriate is the case method for subject integration?

What value is there in case writing for the classroom teacher? How might this respond to teacher as reflective practitioner? ✓✓✓

How compatible is case method teaching for staff development with current professional development initiatives at the district and provincial level?

Summary

The Harvard model of case method teaching is a way of teaching and learning based on sound theoretical foundations that emphasize process, student involvement and relevancy as critical elements of student learning.

Case method teaching exposes students to many of the problems and controversies that are found in real life and are reflective of contemporary culture. In dealing with a case, students are called upon,

under the teacher's guidance, to make their own synthesis of the subject matter, give careful consideration to the merits of various positions, and develop conclusions based on concrete facts and clearly reasoned judgments. Date /
Student

Data gathered in this study indicate that case method teaching can affect teacher and student perception of change in critical thinking, interest and curiosity in learning, and the extent to which students respect alternative views, attitudes and beliefs.

Students in this study claimed they were more likely to read additional information and discuss issues with family and friends outside of the classroom, contributing to the concept of student as lifelong learner. Students described themselves as better communicators and decision makers with case method teaching.

Case method teaching may well be a viable methodology to reflect the principles of learning addressed in the Year 2000 document as well as respond to specific goal statements in the Graduation Program. The data in this small and limited study are sufficiently encouraging to warrant additional research in this field.

APPENDIX A
INSTRUCTIONAL PROGRAM

**A CASE FOR SOCIAL STUDIES
NOTES FOR A TRAINING PROGRAM
KEY TRAINING CONCEPTS**

**Selma Wassermann
Simon Fraser University**

- 1. Orientation to Case Study teaching**
 - 1.1 Instructional format: Play-Debrief-Replay**
 - 1.2 Cooperative learning - its implications**
 - 1.3 The role of the teacher**
 - 1.4 Orienting the students**

- 2. Using cases**
 - 2.1 Principles of writing cases**
 - 2.2 The relationship of cases to "big ideas"**

- 3. The skills of debriefing**
 - 3.1 Using teacher-student interactions that extract meaning**
 - 3.2 The art of attending, paraphrasing and interpreting**
 - 3.3 The rhythmic pattern of debriefing**
 - 3.4 The art of questioning**

- 4. Replay**
 - 4.1 How replay promotes deeper and more extensive inquiry**
 - 4.2 Potential replay activities**

- 5. Dealing with potential problems ("Yeah, but . . .")**
 - 5.1 Covering the curriculum**
 - 5.2 Pupil expectations, performance, behavior**
 - 5.3 Evaluation**

**A CASE FOR SOCIAL STUDIES:
THE CENTENNIAL HIGH SCHOOL GRADE 11 SOCIAL
STUDIES PROJECT**

INSTRUCTIONAL PROGRAM

**Selma Wassermann
Simon Fraser University**

INTRODUCTION

In the last few years, significant changes have occurred in both the thinking about, and in the direction of classroom teaching strategies. Having just recovered from the educational anachronisms of "back to basics" and the limitations of that narrow philosophy on the intellectual well being of our graduates, we are now rebounding with intense concentration on "teaching for thinking." Policy statements from the Ministry of Education cite, "Government believes a new commitment is needed to ensure that the vast majority of students acquire the knowledge, skills and attitudes needed to function effectively in our changing world. Key to this commitment is a fundamental restructuring of the provincial curriculum with a focus on the development of problem solving and creative thinking skills" (Brummet, Policy Directions, 1989, p. 10). Plans from the Ministry suggest that "teachers will be encouraged to learn new instructional strategies so that the new curriculum can be taught in an integrated way to diverse groups of students with increasing emphasis on problem solving and creative thinking skills (Ibid, p. 10).

Isn't it delightful that thinking has finally been thrust into the educational consciousness as the new cause celebre? Why now? Why thinking, and not just more basics, in another variant? Why have educators across the province chosen to focus on thinking as an educational imperative? It is ironic, given that Dewey urged for thinking in his seminal work, How We Think, published in 1906.

There are important reasons for thinking to have surfaced now. A host of books very recently published in the United States have reported dismal findings about the quality of educational experience in that country. (Can Canada be totally exempt from such findings?) The evidence suggests that pupils leave high school with impaired capabilities as thinkers. Instead of developing minds, schools are seen as places where students learn docility, compliance and dependence upon the teacher for all substantive matters of judgment. For some critics of the educational establishment, such disabling of a nation's most precious resource -- its children -- is tantamount to subversion. Unhappily, the evidence may no longer be denied or ignored.

There is good reason to speculate that the future health of our planet is inextricably linked with the kinds of graduates our schools are producing; that compliant, docile, highly dependent youth will not, upon graduation day, become the thoughtful, wise, mature, judicious and self-initiating folk we need to insure the survival of our world. Frogs do not turn into princes. If we are serious about survival in the "information age" we must be serious in our efforts to develop a thoughtful, reasoning citizenry.

What's the hang up, then? We are all for thinking. No serious educator will stand up and say he's against pupils learning to think. Why

is there such a gap, then, between what we say we want for students and what it is that we actually give them in the classroom? What explains the difference between our rhetoric and our classroom practices?

Perhaps it is because many teachers do not know how to teach for higher levels of thinking. Training in how to teach for thinking is virtually non-existent in teacher education programs, and teachers cannot teach what they have not learned. As a consequence, teachers leave education programs with knowledge of subject matter teaching, but with insufficient experience in how to emphasize higher order processes within those subject areas. The unhappy result for pupils is that curriculum emphasis is upon factual content, upon information and information retrieval, the lower order functions, instead of on understanding ideas and issues, the higher order functions.

kinds Learning to teaching for thinking is very much like learning other ~~kinds~~ of complex and sophisticated skills, for example, the learning of a foreign language. Anyone who has tried to master such a skill knows that if one is to become fluent in speaking the new tongue, one needs lots of practice. We do not learn to speak French, for example, just by listening to others speak. We must ourselves study vocabulary, verbs and their conjugations, idioms, nuances, and pronunciation. We must expand our French awareness by studying, examining and analyzing our speech, and the spoken and written words of others. None of this happens in a day, nor even in a two-week intensive workshop. To become a master requires lifelong study. Learning to teach for thinking is very much like what has been described in the study of French. Increased competence is not acquired ~~by~~ listening to the thinking of others. You, yourself, must get practice, developing and sharpening those skills that will enable you to translate the ideas and principles of teaching for thinking in your classroom practice.

The Centennial High School Social Studies Project examines a particular approach to teaching for thinking: the Case Study approach. Teaching by the case method offers a distinct alternative to traditional social studies instruction. It incorporates these features:

[a] Cases present problems drawn from the complexity of real events. They require in-depth examination of important issues, in a disciplined, thoughtful discourse.

[b] Case method teaching requires pupils to be actively involved and to assume responsibility for their ideas and their actions. "Although the logical organization of subject matter is the proper goal of learning, the logic of the subject cannot be truly meaningful to the learner without his psychological and personal involvement in the exploration" (in Jonas Soltas, Encyclopedia of Education, 5th ed., s.v., "Dewey, John").

[c] Emphasis in cases is on the "significant issues," on the important concepts of the social studies curriculum. X

[d] Pupils are required to learn how to reason from data; how to gather and use data in support of argument. X X

[e] The teacher's role is not as a disseminator of information, but as an "extractor of meanings." The teacher, through artful questioning strategies helps students to understand the significant ideas in the curriculum. Emphasis shifts from information collection to comprehension. "A critical responsibility of the instructor is the leadership of the case discussion process. It is not enough to be in command of the substantive knowledge of one's field or the specifics of the case problem. The instructor must also be able to lead the process by which individual students and the overall group explore the complexity of a specific case situation" (C. R. Christensen, Teaching By the Case Method, 1987). X

[f] Case study teaching puts the emphasis on pupil's thinking. "Only by wrestling with the condition of the problem at hand, seeking and finding his own way out, does he think . . . If he cannot devise his own solutions (not in isolation, but in correspondence with the teacher and other pupils) and find his own way out he will not learn, not even if he can recite some correct answer with 100% accuracy" (in Jonas Soltas, Encyclopedia of Education, 5th ed. s.v., "Dewey, John"). X

In use for over fifty years, its reputation firmly established as the backbone of the program at Harvard Business School, teaching by the case method has achieved notoriety, respect and success -- so much so that it has been adopted in other professional schools, specifically law and medicine, as well as in liberal arts courses. More recently, it has been advocated by more extensive application, including the education of teachers. Writing in the new edition of Teaching and the Case Method (1987), C. R. Christensen, Walmsley Professor at Harvard and a long time advocate and practitioner of case method teaching, points to several benefits of this approach to instruction: X X

[a] The case method enables students to discover and develop their own unique framework for approaching, understanding and dealing with (business) problems.

[b] Case method is supportive of a culture that places high value on review and innovation. (When faculty must prepare teaching cases, their continuing contact with the world of practice provides . . . a force for change.) X

[c] Case method teaching is economically efficient. Given well-crafted cases and trained instructors, it works well with large groups of pupils. X

[d] The pedagogy suits the (Business School's) mission of training men and women not only to know, but to act.

[e] Case study teaching is intellectually stimulating for the faculty.

[f] It requires faculty to explore not only what they teach, but how.

Christensen describes case method teaching as "a complicated interaction of case situation, individual student, overall class section and discussion leader -- an effort to blend cognitive and affective learning modes" (Ibid.)

Former students in the M.B.A. program at Harvard describe their experiences with case method teaching:

The initial atmosphere of the classroom does little to restore a feeling of certainty. The behavior of the professor is strangely disconcerting. There is an absence of professional dicta, a surprising lack of "answers," and "cold dope" which the student can record in his notebook; rather he is asked what he would do, and what problems he feels are important. Similarly he finds that today's problems cannot necessarily be solved by yesterday's solutions. Every time he feels that he has arrived at generalizations or principles which will apply in all cases, he is confronted with a set of variables which will not yield to such analysis. The plea that he has insufficient evidence or data on which to make a decision is more or less ignored; he is told to do the best he can with what is available.

As he airs his views, feelings, reactions, attitudes and prejudices and sees them reinforced or rejected by thinking individuals around him, he has an opportunity to re-evaluate and re-appraise his own character and personality. Preconceived notions and handed-down attitudes examined in an atmosphere of reality and with a focus on effectiveness can be seen for what they are (Schon and Sprague, in Teaching and the Case Method).

This is what this program is about. I invite you to work with me and participate fully in the experiences that will lead to increased awareness of teaching for thinking, using the case method, as well as increased skill in those instructional strategies needed to carry out the job effectively in your own classroom.

READINGS

The readings (textbook and article) that support your work on the instructional tasks are listed for each task. Copies of journal articles will be distributed in class. Copies of books may be obtained through the SFU Library facility, or borrowed, on personal loan, from me. The assumption is being made that you will carry on the amount and kind of support reading you feel necessary to work successfully on the instructional tasks.

INSTRUCTIONAL TASKS

The 12 tasks found on the following pages make up the substance of the training program in teaching by the case method. Your work on these tasks, as directed, will enable you to grow in your understanding of the principles and concepts underlying teaching for thinking, using the case * * method approach, as well as develop skills in classroom applications.

The tasks follow the play-debrief-replay instructional design, the model being proposed for your own classroom work in teaching by the case method. Each task requires that you work, cooperatively, with colleagues, on an activity that calls for "active learning," and "minds-on" cognitive * processing. While the tasks are not cases per se, they nevertheless are used in a similar teaching-learning context as cases. Following the "minds-on play" on the instructional task, ideas will be examined in a debriefing session, in a format compatible with the debriefing of cases. Replay with follow-up activities constitutes the final stage of the instructional design. In that way, the experiences of the professional development training program follow in close harmony with the case study teaching methods being advocated in the program.

The design of the instructional program mandates that you direct your own learning, in terms of choices you make; of pacing; of interpersonal functioning. The play-debrief-replay approach is clear that the responsibility for learning lies chiefly in the domain of the "student." While learning in this context seems swell "in theory," in practice it asks the very most that teachers can ask of students: that is, your highest level of thinking and classroom functioning; the greatest exercise of responsibility over your own learning; the open-minded, non-defensive self-scrutiny of the reflective practitioner. While it asks a lot, it is built on the foundation of respect for learners; respect for their ability, their independent functioning, and their persons.

There may be times during the training program when you feel that the demands on you are excessive; when the lack of emphasis on single, correct answers creates too much dissonance; when the need to think your own ideas and shape your own approach to classroom practice is unnerving; when you begin to think "how easy it would be for someone to tell you what to do!" Perhaps these are some of the prices we pay for thinking!

If the prices are high, the rewards are sweet. Teachers cannot give students skills. Students have to work for them. Teachers cannot give students conceptual understanding. Students have to engage, reflectively, in experiences, from which concepts are drawn. Teachers cannot give students the ability to function independently and intelligently. They can,

however, create the conditions in which such abilities can grow and flourish.

In creating the conditions of play-debrief-replay in the training context, what is "preached" is also practiced. You work in a teaching for thinking context, experience it from inside to outside, and at the end of the program, come to a fuller realization of what it means to "teach for thinking."

TASK 1: Orientation Task

What does teaching by the case method look like?
How does the use of cases promote pupil thinking?
How does the use of cases promote understanding of
social studies concepts?

In this task you will examine how a case is used to advance pupil thinking about how a bill is read into law in a parliamentary system.

Support Readings

- ** Why Study History, by Paul Gagnon *Attended Monday*
- ** Forward to the Trivia of 1890: The Impending Social Studies Program? by Richard E. Gross
- ** Models of Wisdom in the Teaching of History, by Samuel Wineburg and Suzanne Wilson
- ** American History Textbooks: Where Do We Go From Here? by Gilbert Sewall
- ** Anit-Democratic Attitudes of High School Seniors in the Orwell Year, by Stanley Elam

[1] View the orientation videotape.

[2] Work in pairs, or trios, and discuss your observations of the tape. In your discussion, focus on the following:

A. Observing the Play:

- a. What observations were made about the case?
- b. How was the case constructed to focus on the big ideas of the topic?
- c. What higher order thinking operations were called for in the case?
- d. What observations did you make of pupil behavior?
- e. What observations did you make of the teacher?
- f. Did the case generate thinking? How do you know?

B. Observing the Debriefing:

- a. What were some general observations of the Debriefing?
- b. How did Debriefing build on the Play experience?
- c. What observations were made of pupil behavior during Debriefing?
- d. What observations were made about the teacher's interactions with pupils?
- e. Did the Debriefing promote pupil thinking? How do you know?

GO ON TO THE NEXT PAGE TO COMPLETE THIS TASK

- [3] Considering Replay
- a. What potential follow-up activities would be productive, so that pupils could work the big ideas more extensively?
 - b. How does Debriefing stimulate Replay?
- [4] What observations did you make of the instructional approach: Play-Debrief-Replay in case method teaching?
- [5] What do you see as some implications of how Play-Debrief-Replay would work in the classroom, with regard to the following:
- a. students working in groups?
 - b. the role of the teacher?
 - c. orienting the students to this way of learning? ✓
 - d. promoting pupil thinking? /
 - e. concept development?
- [6] What do you see as some potential problems in classroom application?
- [7] Be prepared to share your ideas in the Debriefing.

MATERIALS NEEDED:

Coquihalla Highway videotape
Coquihalla Highway "case"

Replay (to be done in groups following the Debriefing):

What do you see as some key characteristics of teaching by the case method, following a Play-Debrief-Replay instructional design? In other words, in your view, what has to be done for this to work successfully? Put together a list of what you see as crucial conditions in the classroom application of teaching by the case method.

TASK 2: STUDYING CASES (1)

How does it feel to work with a case? What's the experience like? What do you learn from working with cases?

SUPPORT READINGS:

** Curriculum and Case Notes, by Richard Elmore

[1] Work in quartets. Read "A Case of Swallowed Pride" and discuss the study questions with your group.

[2] Be prepared to share your ideas in the debriefing.

MATERIALS NEEDED:

Case 2: A Case of Swallowed Pride

Replay (to be done following debriefing):

Work in pairs or trios. Make some observations of the "play" and the "debriefing" stages of this case study session. What do you see as the KEY ingredients that are required for the successful implementation of case studies? Of debriefing? List them.

TASK 3: STUDYING CASES (2)

What are cases? How are they different from stories? How are cases written so that they incorporate the big ideas, or concepts, of the social studies content? What kinds of study questions allow for deeper examination of case material?

SUPPORT READING:

** Reflections of a Case Writer, by Abby Hansen

[1] Work in pairs, or trios. Study the sample case, A Case of Swallowed Pride. Talk together about the following:

- a. What big ideas (important concepts) are being examined in this case?
- b. How is the case written to illuminate those big ideas, that is, where in the case do you find the big ideas incorporated?
- c. What makes the cases interesting?
- d. How are the study questions written to encourage thinking about the issues?
- e. What aspects of the big ideas do the study questions address?

[2] What do you perceive to be the important principles in case writing? List them.

[3] What do you perceive to be the important principles in writing study questions? List them.

4] Be prepared to share these ideas in the debriefing.

MATERIALS NEEDED:

Case: A Case of Swallowed Pride

Replay (to be done following debriefing):

Work in trios and do several of the study questions for one of the cases. Upon reflection, how did you work influence your perceptions of the case?

Handwritten note: 11. 3. 1. After debriefing

TASK 4: WRITING A CASE

What me? Write a case? Yikes!

SUPPORT READINGS:

** Social Studies As Controversy, by R. Jerrald Shive

[1] Work in pairs. In this task, the pair of you are to write a DRAFT of a very short case -- no more than two pages of copy -- that illuminates one of the following big ideas:

- a. The course that history takes is dependent on the climate, vegetation, soil and geology of a country.
- b. The economy of Canada was largely dependent on the fur trade.
- c. Canada has a history of being committed to peace.
- d. Canada was settled and discovered by many immigrants.
- e. The proximity of the US remains a constant factor in the economy and politics of Canada.
- f. The threat of pollution began in the automation period and continues to be a problem.
- g. other (your choice)

[2] Begin your approach to writing the case by first identifying 2 or 3 big ideas that are subset to the main big idea (see Case 2: A Case of Swallowed Pride).

[3] Think **STORY!** What story can you invent that would illustrate these ideas?

[4] Reread your draft copy and check it out to see that it has incorporated elements of the big ideas you have specified.

[5] Exchange cases with another pair and each pair serve as "critics" for each other's cases. Make sure your criticism is helpful, and critically additive. Give helpful suggestions for how the cases may be worked over in the next draft. Consult with each other about the revisions that are necessary.

[6] Be prepared to share your cases in the Debriefing.

MATERIALS REQUIRED:

Study Sheet CS-4: Summary of Big Ideas in Canadian History

Replay:

Working in pairs, revise your case, based upon the consultation and your final decision about how it should be rewritten. Turn in the case when it is finished. Remember, no more than 2 pages!

TASK 5: STUDYING STUDY QUESTIONS

Some questions call for students to think more deeply about issues. Other questions ask students to recall information.

Case study is strengthened when the study questions:

- (a) help students to examine the big ideas
- (b) promote students' discussion about the issues
- (c) do not lead to single, correct answers, but instead give students thinking tools to examine and understand the ambiguities underlying the big ideas

Study questions should provoke the kind of discussion that elevates student interest and motivates them to dig more deeply into the content.

[1] Work in pairs. Study Worksheet CS-5: Writing Good Study Questions. Follow the directions and complete the worksheet.

[2] Be prepared to share your responses in the debriefing.

MATERIALS NEEDED:

Worksheet CS-5: Writing Good Study Questions

Replay:

Work in pairs and write 5 study questions for the case you wrote in Task 4.

TASK 6: STUDYING INTERACTIONS - INTRODUCTION TO DEBRIEFING

Some interactions call for students to reflect, and to examine ideas. Other interactions call for students to recall information. Knowing the differences, and being able to use different interactions for different purposes is one of the keys to effective debriefing.

SUPPORT READINGS:

** The Art of Leading A Discussion by Adena Rosmarin

** Debriefing: Using Interactions That Promote
Reflection,
by Wassermann

[1] Work in pairs or trios. Using Worksheet T-2: Coding Sheet as a guide, study Transcripts CS-6A & 6B, with respect to the following:

- a. What kinds of responses are most frequently used in each?
- b. What habits of thinking do the teacher's responses promote in each?
- c. How are the students helped to think about the issues in each?
How did you determine this?
- d. What, in your view, is the long term effect of the interactions in each of the transcripts on building habits of thinking?

[2] Working together, and using the Coding Sheet as a guide, code the responses on each transcript directly on the transcript. After doing this, talk about what you see as the critical differences between these two ways of responding. Be prepared to share your ideas in the debriefing.

MATERIALS NEEDED:

Worksheet T-2: Coding Sheet
Transcripts CS-6A & 6B

Replay:

Examine the transcripts again. Observe particularly the effect of a teaching for thinking response on the student's subsequent response. Observe also the effect of a low-level response on a student's subsequent response. How do you explain these differences?

TASK 7: STUDYING INTERACTIONS IN A DEBRIEFING SESSION

How do a teacher's responses help students to be more reflective? What responses promote more active cognitive processing? What is the "rhythm" of teaching for thinking interactions? What kinds of questions help pupils to think about the big ideas? What kinds of questions intimidate students?

SUPPORT READING:

** The Art of the Question, by Wassermann

[1] Work in pairs or trios. Study the Worksheets Tft-7: Training in Attending, and Tft-7A: Responses that Promote Reflection. Then, analyze the teacher-student interactions on this transcript, paying particular attention to the following:

- a. how the teacher attends to each student's idea
- b. how the teacher communicates respect for the student's idea
- c. how the teacher "manages" the group discussion
- d. how the teacher's responses help a student to become clearer about the idea
- e. how the teacher's responses help the student to think about the big ideas
- f. how the teacher's responses are both respectful and attentive, but also work to move the inquiry forward, digging for deeper meanings.

MATERIALS NEEDED:

Worksheet Tft-7: Training in Attending

Worksheet Tft-7A: Responses that Promote Reflection

Transcript: Coquihalla Highway Debriefing

Coding Sheet T-2

Replay:

Work again in your pairs or trios and using Coding Sheet T-2, code, directly on the transcript, the first four pages of teacher responses. Do this in a way that helps you to further your understanding of how teacher-student interactions work to facilitate the examination of big ideas in debriefing.

TASK 8: PRACTICE IN FORMULATING TEACHING FOR THINKING RESPONSES

How are responses formulated that help students reflect on their ideas? In this task you will practice writing responses that are respectful of students' ideas, and that call for further cognitive processing.

SUPPORT READING:

No new readings for this task.

[1] Work in pairs. Using Worksheet Tft-7A as a guide, study Worksheet CS-8: Practice in Formulating Teaching for Thinking Responses.

[2] Try to "listen" to the student's idea as he or she might have spoken it. Talk together about what you perceive to be the student's message. What is the student telling you? What are the key words in the student's statement?

[3] In formulating a response, think about: how accurately it reflects the key words of the student's statement; how it respects the student's idea; how the student may use it to think more about the important issues behind that idea. Talk together about what some appropriate responses might be for each student statement.

[4] Then, retreat to a neutral corner and working alone, write a response that meets the criteria for a good teaching for thinking response for each student statement. Write, too, what you think the student might reply.

[4] Be prepared to share your responses in the debriefing.

MATERIALS NEEDED:

Worksheet Tft-7A: Responses that Promote Reflection

Worksheet CS-8: Practice in Formulating Responses

Replay:

Work in the same pairs. Revisit your responses on Worksheet CS-8. Make any changes you think appropriate. Then, turn your completed work in.

TASK 9: PRACTICE IN USING DEBRIEFING INTERACTIONS -- ATTENDING, PARAPHRASING AND INTERPRETING

In this task you practice skills used in earlier tasks, but do so in live simulations. Debriefing interactions requires you to integrate the skills of attending, capturing meaning, and formulating a paraphrasing or interpreting response so that it accurately reflects meaning and helps the student to think more about the issues.

SUPPORT READINGS:

There are no new readings for this task.

[1] Work in trios. Prepare for this task by rereading Worksheet TTT-7A: Responses that Promote Reflection.

[2] Each of you select a teaching for thinking "leader" from Worksheet CS-9: Debriefing Leaders. Do not discuss your choices with each other.

[3] Take turns playing the roles of teacher, student and monitor.

A. Teacher: ** Listen to the student read his or her statement.
 ** Attend to what the student is saying.
 ** Respond in a way that shows the student you have
key accurately heard his or her idea. Make sure the
your words of the student's statement are imbedded in
 response.
 ** Use good paraphrasing responses, or interpret when
you think that response form is appropriate.
 ** Try to keep your responses focused so that they
become tools for helping the student to understand the
important ideas.

B. Student: ** Read the statement you have chosen.
 ** Respond to the teacher's interactions naturally.
 ** Continue the interaction so that you and the teacher
have 3 turns to respond to each other.

C. Monitor: ** Use Worksheet T-2: Coding Sheet, and code the
entire dialogue as accurately as possible.

GO ON TO THE NEXT PAGE TO COMPLETE THIS TASK

[4] Debrief the practice session using the following guidelines:

Student: Give teacher feedback about his or her use of teaching for thinking responses.

Teacher: Tell about any difficulties you had in formulating good teaching for thinking responses.

Monitor: Use the Coding Sheet and review the teacher's responses as you have recorded them. Make suggestions for how the teacher's interactions might have been improved.

[5] Change roles and replay the practice session so that each of you has a chance to be teacher, student and monitor.

MATERIALS REQUIRED:

Worksheet T-2: Coding Sheet

Worksheet TTT-7A: Responses that Promote Reflection

Worksheet CS-9: Debriefing Leaders

TASK 10: A CASE FOR SOCIAL STUDIES: A BIG TASK

In this task, you work with your revised case from Task 4, and try it out in a micro-teaching situation.

SUPPORT READINGS:

There are no new support readings for this task.

[1] Working in pairs, make any final revisions you think are needed in the case you wrote for Task 4. Check on your study questions to make sure that they are open ended and that they help to focus student inquiry on the big ideas that you want them to examine.

[2] Team up with another pair, and take turns "teaching your case." One pair becomes the "teaching team" and the other pair becomes the student team.

- a. Teaching team: One of you acts as teacher, the other monitor.
- b. Present your case to the students.
- c. Observe them as they work through the case.
- d. Observe them as they respond to the study questions.
- e. Give them adequate time for case study.
- f. Then, the person acting as teacher, carry on the debriefing of the case. The person acting as monitor, observe and tape record the debriefing session.
- g. Keep the debriefing going for at least 10 minutes, no longer than 15.
- h. When the debriefing is completed, play the tape and listen to it, all together, using Worksheet T-2: Coding Sheet, as a guide. Talking together, debrief the whole session, from a discussion of the case, to the study questions, to the interactions used in the debriefing.

[3] Then, teaching team change places with student team, and replay the session, using a new case.

[4] Be prepared to share your ideas in the debriefing.

MATERIALS NEEDED:

Your own case, developed for Task 4.
Worksheet T-2: Coding Sheet
Tape recorder

TASK 11: A CASE FOR SOCIAL STUDIES - IN-CLASS TRIALS

This task is for the intrepid teacher who is now ready to play out teaching by the case method in his or her own class and to learn from such a field trial about the next steps needed in professional development.

The task is a repeat of Task 10 -- using your case and the study questions, but with a group of pupils from your social studies class. You may want to work with the whole class, or you may want to find a way to occupy some students, while working with a selected group of others.

In either situation, take some measures to prepare the students for the case, making your plans and expectations clear. Form working groups and let them carry on with the case study and study questions. When students have completed the case study, debrief them, using your best interaction skills. Keep the debriefing to about 10 - 15 minutes.

Now, here's the knockout blow! Videotape record this entire session, from presentation of case, through debriefing. After the session, study your own tape, and code your debriefing responses, using Coding Sheet T-2. Make an analysis of the session on Worksheet CS-11: Task Analysis.

Be prepared to bring and share your tape in the seminar.

MATERIALS NEEDED:

Your own case and study questions
Worksheet T-2: Coding Sheet
Worksheet CS-11: Task Analysis
Videotape recorder and blank tape

TASK 12: REFLECTING ON CLASSROOM APPLICATIONS

In this final task, you are asked to reflect upon some of the important conditions that must be operative in your classroom if your work in case method teaching is to be successful. It may be important for you to consider each of these dilemmas of application, prior to full implementation, to insure your successful work in the fall.

This may be a good time to begin more substantive reading and thinking about fall classroom applications. The readings below are suggested.

SUPPORT READINGS:

A Place Called School, by John Goodlad

The Schools We Deserve, by Diane Ravitch

[1] Work in pairs and discuss how you would problem solve and deal with these dilemmas of implementation:

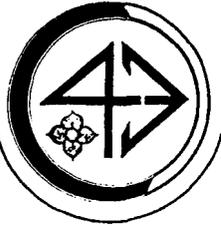
- a. orienting the students
- b. personal expectations for students to respond positively and quickly to these new learning conditions
- c. concerns about covering the curriculum
- d. students who do not stay on task
- e. students who don't carry their share of the load
- f. evaluating student growth
- g. fears of loss of control
- h. specific discipline problems related to giving more control over student learning to students
- i. lack of sequential teaching
- j. other

[2] Replay: Do this task again with a new partner.

[3] Then, join up in quartets, and make some plans that include strategies for "on the job" coping when you are doing your field trials in the fall and think you may be "losing it."

APPENDIX B

ETHICS APPROVAL



School District No. 43 (Coquitlam)

550 Poirier Street ~ Coquitlam, B.C. ~ V3J 6A7 ~ Tel. 939-9201 ~ Fax. 939-7828

1991-02-27

Ms. Maureen Adam,
836 Pinemont Avenue,
Port Coquitlam, B.C.
V3B 5B8

Dear Ms. Adam:

I am writing in response to your letter of February 5th, in which you request permission to utilize data collected in the Case Study project at Centennial Senior Secondary School, as the basis for a research component of your Master's degree requirements.

Your request has met with District approval and I gather you have cleared this directly with Mr. Melville, Principal of the school.

As you are aware, the use of this information is to be limited to the analysis required for your Master's thesis. In addition it is subject to confidentiality of the information at student and school level.

Good luck with your project, it promises to provide an interesting analysis of the Case Study method of instruction.

Yours truly,

Alan R. Taylor, Ed.D.,
Director of Instruction, Curriculum/Assessment

ART/pks

cc - W. Melville
J. Beck

APPENDIX C

STUDENT QUESTIONNAIRE

Evaluation of Case Study Instruction
Grade 11 - Social Studies
Centennial High School

The following questions are designed to focus on the degree of change you have noticed in specific areas this term using the case study method of instruction.

For the purpose of this questionnaire the case study method includes:

- the use of written case material
- working with your ideas in groups, and
- the open class discussions following this group work.

Please circle the number on the scale that best measures the degree of change you have noticed and use the space provided to explain your choice. (Please use the reverse side of additional space is required)

1. How has the use of the case study method affected your ability to examine complicated issues in a critical way?

1

2

3

4

5

no change

dramatic change

Use the space provided to explain your choice.

2. How has your ability to communicate your ideas been affected by the case study process?

1

2

3

4

5

no change

dramatic change

Use the space provided to explain your choice.

3. Since the introduction of the case study method what kinds of change have you noticed in your ability to make good decisions?

1

2

3

4

5

no change

dramatic change

Use the space provided to explain your choice.

4. What effect has the case method had on your level of curiosity and general interest in learning?

1

2

3

4

5

no change

dramatic change

Use the space provided to explain your choice.

5. What kinds of changes have you noticed in the level of respect you have for the different views, attitudes and beliefs held by other students.

1

2

3

4

5

no change

dramatic change

Use the space provided to explain your choice.

6. To what extent has the case study method spurred you on to read material beyond those presented in class?

1 2 3 4 5

no change

dramatic change

Use the space provided to explain your choice.

7. To what extent have you engaged in any additional discussion of the issues beyond the classroom?

1 2 3 4 5

no change

dramatic change

Use the space provided to explain your choice.

Please use the space provided to give additional feedback on the use of the case study method that has not been addressed in the questionnaire. Would you support further use of the method in social studies instruction? Would you recommend its use in other subject areas?

APPENDIX D

CODING SHEET

NAME _____

Coding Sheet

A. Responses that Inhibit Thinking

a. Responses that bring closure:

- Agrees/disagrees with student's idea _____
- Doesn't give student a chance to think _____
- Tells student what s/he (teacher) thinks _____
- Talks too much/explains it his/her way _____
- Cuts student off _____
- Other closure responses _____

b. Responses that promote fear:

- Heckles/is sarcastic/puts down idea _____

B. Responses that Limit Student Thinking

- Looks for single, correct answer _____
- Leads student to "correct" answer _____
- Tells student what to do _____
- Gives information _____

C. Responses that Encourage Thinking

a. Basic responses that encourage re-examination of the idea:

- Saying the idea back to student _____
- Paraphrasing _____
- Interpreting _____
- Asking for more information, e.g.

"Tell me a little more about that," or "Help me to understand what you mean" _____

b. Responses that call for analysis of the idea:

- Give me an example _____
- What assumptions are being made? _____
- Why do you suppose that is good? _____
- What alternatives have you considered? _____
- How does (that) compare with (this)? _____
- How might that data be classified? _____
- What data support your idea? _____

c. Responses that challenge:

- What hypotheses can you suggest? _____
- How do you interpret that? _____
- What criteria are you using? _____
- How would those principles be applied in this situation? _____
- What predictions can be made based on that data? _____
- How would you test that theory? _____
- What new scheme/plan can you envision for that situation? _____

d. Accepts students idea non-judgmentally:

- I see _____
- Thank you _____

D. Responses unrelated to Debriefing the big ideas

- Classroom/behavior management responses _____
- Speech mannerisms _____
- Other _____

BIBLIOGRAPHY

- Ahmandian, A. (1986). Case Analysis and extension classroom discussion an alternative in teaching management courses. Journal of Education for Business, 61, 170-172.
- Anderson, L.W., & Scott, C. C. (1978). The relationship among teaching methods, student characteristics, and student involvement in learning. Journal of Teacher Education, 29(3), 52-57.
- Andrews, Kenneth R. (Ed.) (1953). The Case Method of Teaching Human Relations and Administration. Cambridge: Harvard University Press.
- Argyris, C. (1980). Some limitations of the case method: Experiences in the Management Development Program. Academy of Management Review, 5, 291-298.
- Barnett, Carne. (1991). Building a Case Based Curriculum to Enhance the Pedagogical Content Knowledge of Mathematics Teachers. Journal of Teacher Education, 8, 273-280.
- Bauer, R.S. (1955). Cases in College Administration, with suggestions for their preparation and use. New York: Teachers College, Columbia University.
- Baxter, V. (1988). A case-study method for teaching industrial sociology. Teaching Sociology, 16(1), 21-24.
- Berger, M.A. (1983). In Defense of the Case Method: A reply to Argyris. Academy of Management Review, 8(2), 329-333.
- Bickerton, L., Chambers, R., Dart, G., Fukui, S., Gluska, J., McNeill, B., Odermatt, P., & Wassermann, S. (1991). Cases for Teaching in the Secondary School. Coquitlam: Caseworks.
- Bogdan, R., & Bikien, D. (1982). Qualitative Analysis in the Social Sciences. New York: Wiley,

Bogdan, R., & Taylor, S. (1975). Introduction to Qualitative Research Methods. New York: Wiley

Christenson, Roland C. and Hanson, Abbey J. (1987). Teaching and The Case Method. Boston, Massachusetts: Harvard Business School.

Christensen, Roland C., Hansen, Abbey J. & Moore, James F. (1987). Teaching by the Case Method: Instructor's Guide, Boston, Massachusetts: Harvard Business School.

Christensen, Roland C., Garvin, David A., & Sweet, Ann. (1991). Education for Judgment: The Artistry of Discussion Leadership, Boston, Massachusetts: Harvard Business School.

Clark, V.N. (1986). The effectiveness of case studies in training principals, using the deliberative orientation. Peabody Journal of Education, 63, 187-195.

✓ Cochran, D.S. & Givson, C.K. (1984). Improving communication and problem-solving skills through behaviour modeling and case approach to learning. Journal of Business Education, 60, 70-72.

Combs, Arthur W. (1981). What the Future Demands of Education. Phi Delta Kappan, 1, 369-372.

Crossley, Michael & Vulliamy, Graham. (1984). Case-Study Research Methods and Comparative Education. Comparative Education, 20(2), 193-207.

Dewey, John. (1933). How We Think, Boston: D.C. Heath.

Dooley, A.R. & Skinner, W. (1977). Casing case method methods. Academy of Management Review, 2, 277-290.

✓ Egan, Kieran. (1980). Memory, Imagination, and Learning: Connected by the Story. Phi Delta Kappan, 2, 455-459.

- Eisenhardt, Kathleen M. (1989). Building Theories from Case Study Research, Academy of Management Review, 14(4), 532-550.
- Epstein, W. (1981). The Classical Tradition of dialectics and American Legal Education. Journal of Legal Education, 31, 3-5.
- Finn, Jeremy D. (1989). Withdrawing from School. Review of Educational Research, 59(2), 117-142.
- Fitzpatrick, Ann R. (1989). Social Influences in Standard Setting: The Effects of Social Interaction on Group Judgments. Review of Educational Research, 59 (3), 315-328.
- Ford, Leroy. (1969). Using the Case Study in Teaching and Training. Nashville, Tennessee: Broadman Press.
- Ford, M. E., & Nicholas, C.W. (1987). Humans as self-constructing living systems: Putting the framework to work. Hilldale, NJ: Lawrence Erlbaum.
- Forrester, J. (1981). The Use of Case Studies in Pre-experience Business Education. Part II - Using Case Studies Effectively. Vocational Aspects of Education, 33(86), 67-71.
- Fullan, Michael. (1985). Change Process and Strategies at the Local Level. The Elementary School Journal, 83, 3.
- Fullan, Michael. (1991). The Meaning of Educational Change. New York: Teachers College Press.
- ✓ Gerlach, Ronald, & Lamprecht, Lynne W. (1988). Teaching about The Law. Cincinnati: W.H. Anderson Co.
- ✓ Gibson, C.K. (1990). Questioning Skills for Discussion Leadership: A Necessary Ingredient For Effective Case Teaching. Journal of Education For Business, 65, (2), 218-21.

- Glaser, B., & Strauss, A.L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine.
- Greenwood, Gordon E., & Parkay, Forrest W. (1989). Case Studies For Teacher Decision Making. New York: Randon House.
- Hamilton, S.E. (1986). Raising Standards and Reducing Dropout Rates. Teachers College Record, 87, 410-429.
- Harmin, M., Kirschenbaum, H., & Simon, S. (1973). Clarifying Values Through Subject Matter. Minneapolis: Winston Press.
- ✓ Hunt, P. (1951). The Case Method of Instruction. Harvard Educational Review, Summer, 2-18.
- Jackson, Gregg B. (1980). Methods for Integrative Reviews. Review of Educational Research, 50(3), 438-460.
- Jacobson, R.L. (1984). College Teaching by the Case Method. The Chronicle of Higher Education, 28, 17.
- Kagan, Dona M., & Tippins, Deborah J. (1991). How Teachers' Classroom Cases Express Their Pedagogical Beliefs. Journal of Teacher Education, Sept.-Oct., 281-290.
- Kleinfield, Judith. (1991). Changes in Problem Solving Abilities of Students Taught Through Case Methods. Paper presented to the American Educational Research Association, Chicago.
- Kolb, David A. (1984). Experiential Learning: Experience as the Source of Learning and Development. New Jersey: Prentice-Hall Inc.
- Kraft, R. & Haas, J. (1986). PROBE: Problem-Based Teacher Education. Unpublished paper, University of Colorado: Boulder.
- Lewin, Kurt. (1951). Field Theory in Social Sciences. New York: Harper and Row.

- McNair, M.P. (1954). The Case Method at Harvard Business School. New York: McGraw-Hill.
- Merseth, Katherine K. (1991). The Early History of Case-Based Instruction: Insights for Teacher Education Today. Journal of Teacher Education, Sept-Oct., 250-262.
- Ministry of Education. (1989). Year 2000: A Curriculum and Assessment Framework for the Future (Draft) Province of British Columbia.
- Ministry of Education. (1990a). Annual Report: July 1, 1988 to June 30, 1989. Victoria: Queens Printer for British Columbia.
- Ministry of Education. (1990b). Year 2000: A Curriculum and Assessment Framework for the Future. Graduation Program. Province of British Columbia.
- Minister of State for Youth. (1991). Early School Learners. School District #43 Coquitlam, British Columbia: Government of Canada.
- Ogawa, Rodney T., & Malen, Betty. (1991). Towards Rigor in Reviews in Multivocal Literatures: Apply the the Exploratory Case Study Method. Review of Educational Reserch, 61(3), 265-286.
- Paget, N. (1988). Using Case Methods Effectively. Journal of Education For Business, 63, 175-180.
- Parson, Phillip G., & Meyer, Jan H. (1990). The Academically 'At Risk' Student: A Pilot Intervention Programme And Its Observed Effects On Learning Outcomes. Higher Education, 20, 323-334.
- Patton, Michael. (1980). Qualitative Evaluation and Research Methods. Beverly Hills, CA: Sage Publications.
- Piaget, Jean. (1970). Genetic Epistemology. New York: Columbia University Press.

Pogrow, Stanley. (1990). Challenging At-Risk Students: Findings from the HOTS Program. Phi Delta Kappan, January, 389-397.

Progrow, Stanley, (1990). A Socratic Approach to Using Computers with At-Risk Students. Educational Leadership, January, 61-66.

✓✓ Postman, Neil. (1989). Learning by Story. Atlantic, December, 119-124.

Raths, L., Wassermann, S., Jonas, A., & Rothstein, A. (1986). Teaching for Thinking: Theory, Strategies and Activities for the Classroom. New York: Teachers College Press.

Reynolds, J. J. (1978). There's a Method in Cases. Academy of Management Review, 3, 129-133.

Reynolds, J. J. (1980). Case Method in Management Development: Guide to Effective Use. Geneva: International Labour Office.

Rogers, Carl. (1983). Freedom to Learn. Columbus: Charles E. Merrill Publishing Co.

Sargent, C. G., & Belisle, Eugene L. (1955). Educational Administration: Cases and Concepts. Boston, Mass: Houghton Mifflin Co.

✓✓ c.f. Scully, A.L. (1984). The case method. History and Social Science Teacher, 19(3), 178-180.

Seeman, M. (1975). Alienation Studies. In A. Inkeles (Ed.). Annual Review of Sociology. Palto Alto, CA: Annual Review Inc.

Shulman, Judith H. (1991). Revealing the Mysteries of Teacher-Written Cases: Opening the Black Box. Journal of Teacher Education, Sept.-Oct., 250-262.

Shulman, Lee S. (1987). Teaching Alone, Learning Together: Needed Agendas for the New Reforms. At a symposium on Restructuring Schooling for Quality Education, conducted at Trinity University: San Antonio, Texas.

- Slavin, R.E. (1983). Cooperative Learning. New York: Longman Inc.
- Sperle, D. H. (1933). The Case Method Technique in Professional Training. New York: Teacher College Publications.
- Sperle, Diana Henryetta. (1972). Case Method in Professional Training. New York: AMS Press.
- Stenhouse, L. (1979). Case Study In Comparative Education, Particularity and Generalisation. Comparative education, 15, 5-10.
- Strauss, Anselm. (1987). Qualitative Analysis For Social Scientists. New York: Cambridge University Press.
- Sullivan, Barry. Q.C. (1988). Legacy for Learners. Royal Commission on Education: Province of British Columbia.
- Tedesco, E.H. (1983). Effective Case Discussion. Business Education Forum, 37, 8-9.
- Tedlock, David. (1981). The Case Approach To Composition. College Composition and Communication, 32(3), 253-261.
- Towl, A.R. (1969). To Study Administration By Cases. Boston, Mass.: Harvard University Press.
- Wassermann, Selma, & Ivany, J.W. George. (1988). Teaching Elementary Science: Who's Afraid of Spiders. New York: Harper and Row.
- Wassermann, Selma. (1990). Serious Players in the Primary Classroom: Empowering Children Through Active Learning Experiences. New York: Teachers College Press.
- Wassermann, Selma. (1991). A Case For Social Studies: The Centennial High School Grade II Social Studies Project. Phi Delta Kappan, Vol. 73, No. 8.
- Wilson, R.J., & Tomera, A.N. (1980). Enriching Traditional Biology With An Environmental Perspective: Using Case Studies in a Simulation

format to Influence Students' Environmental Attitudes. Journal of Environmental Education, 12, 8-12.

Woodring, Paul. (1989). A New Approach to the Dropout Problem. Phi Delta Kappan. February, 468-469.

Yin, R.K. (1984). Case Study Research - Design and Methods. Beverly Hills, CA: Sage Publications, Inc.

Zappie, G.F. (1986). The Case Method and Computer Simulations: Observations, Comments and Justification. Journal of Education for Business, 61, 330-331.